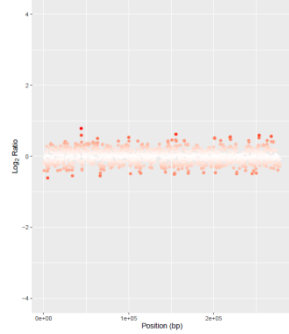


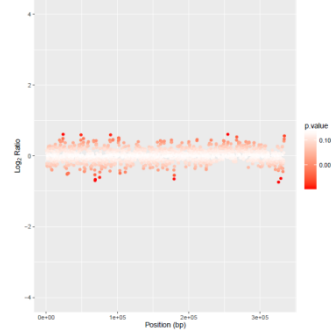
## Anexo 1

Gráficos comparativos de la cobertura de la cepa WT y la cepa resistente a anfotericina:

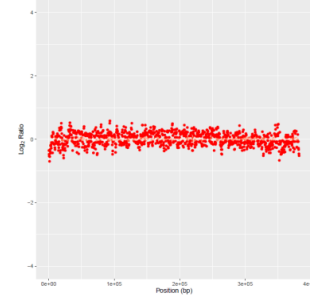
Cromosoma 1



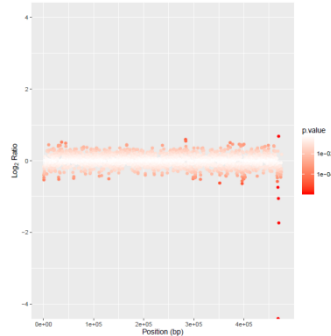
Cromosoma 2



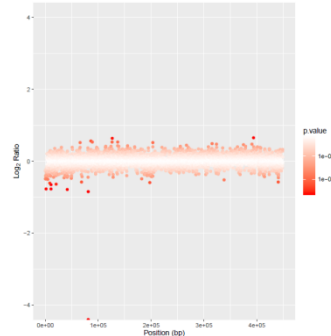
Cromosoma 3



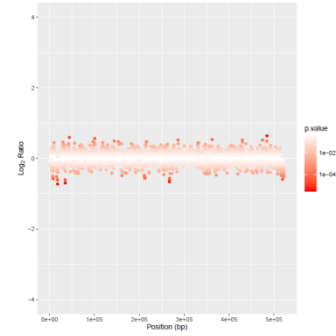
Cromosoma 4



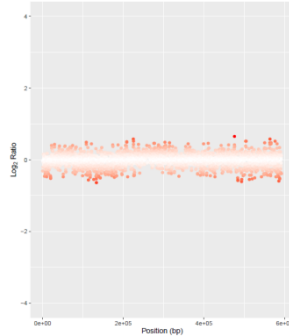
Cromosoma 5



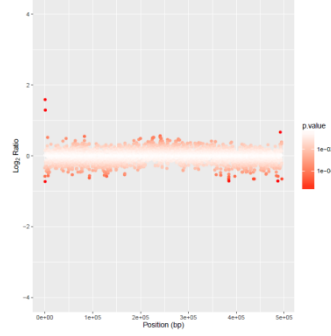
Cromosoma 6



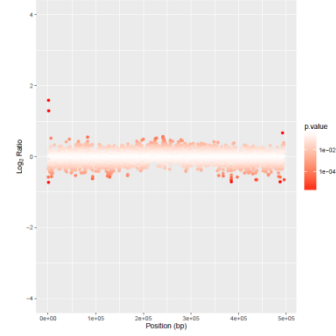
Cromosoma 7



Cromosoma 8



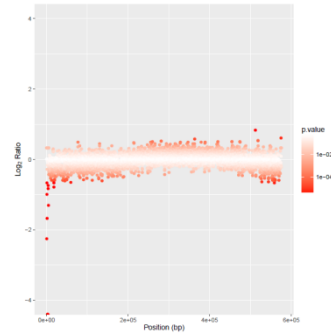
Cromosoma 9



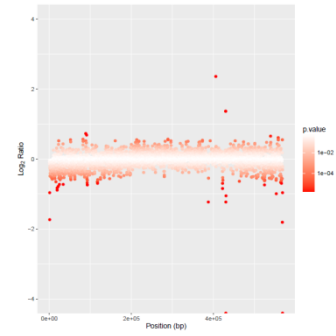
Cromosoma 10



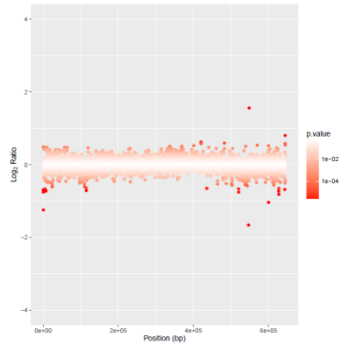
Cromosoma 11



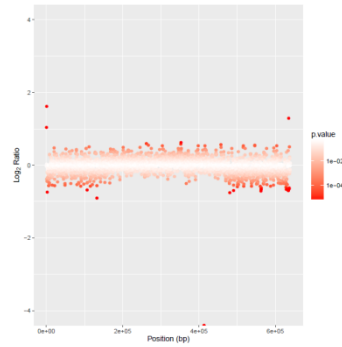
Cromosoma 12



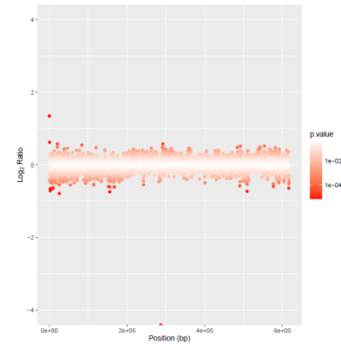
Cromosoma 13



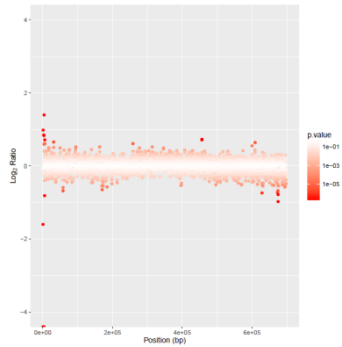
Cromosoma 14



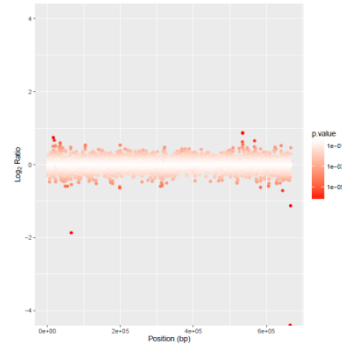
Cromosoma 15



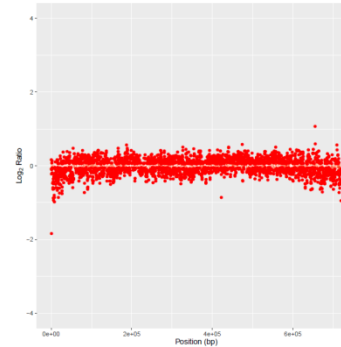
Cromosoma 16



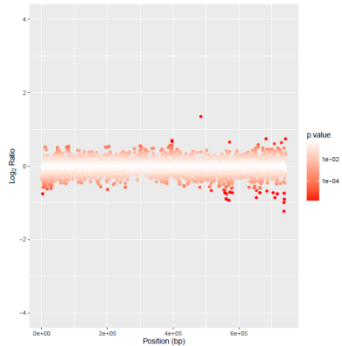
Cromosoma 17



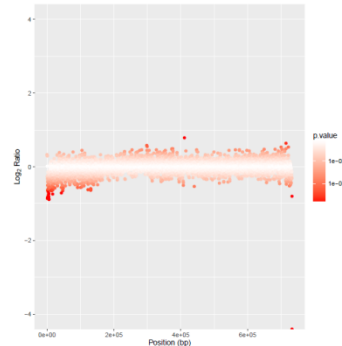
Cromosoma 18



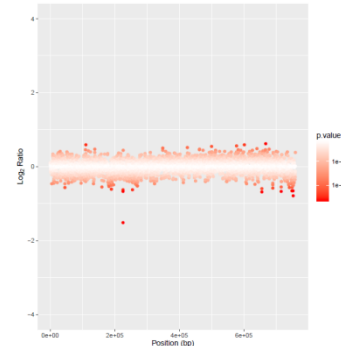
Cromosoma 19



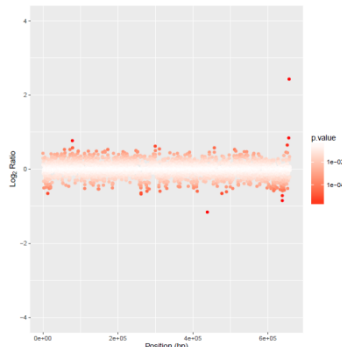
Cromosoma 20



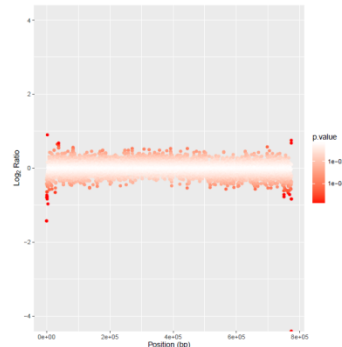
Cromosoma 21



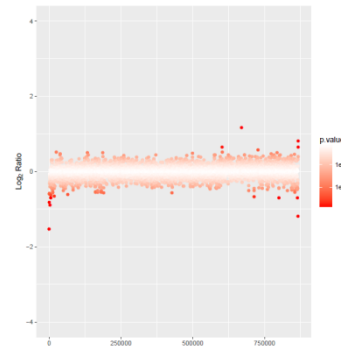
Cromosoma 22



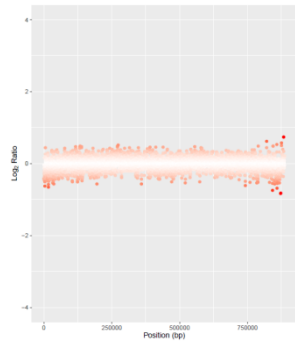
Cromosoma 23



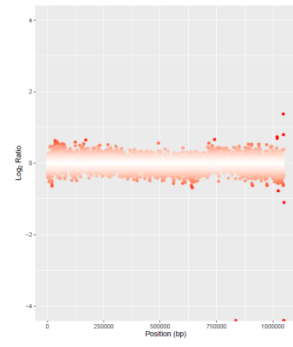
Cromosoma 24



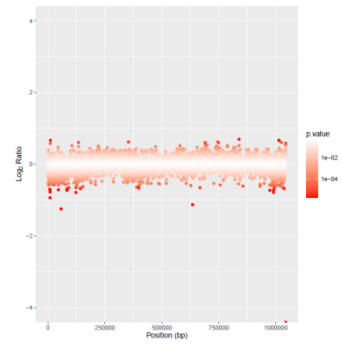
Cromosoma 25



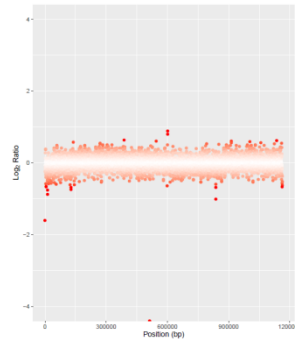
Cromosoma 26



Cromosoma 27



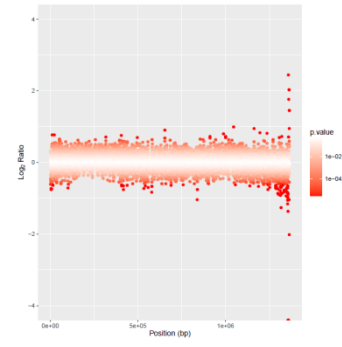
Cromosoma 28



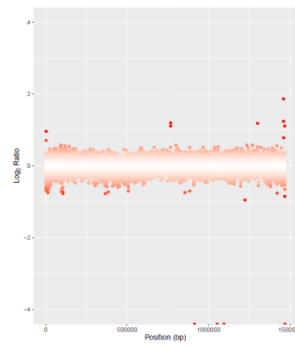
Cromosoma 29



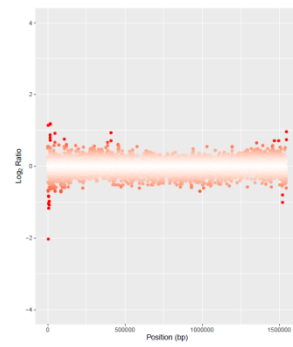
Cromosoma 30



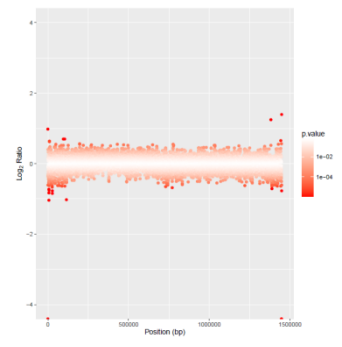
Cromosoma 31



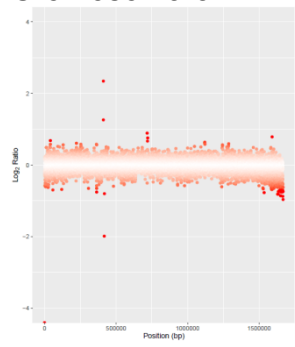
Cromosoma 32



Cromosoma 33



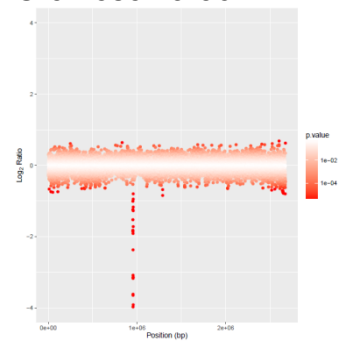
Cromosoma 34



Cromosoma 35

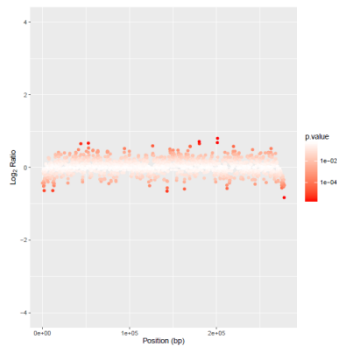


Cromosoma 36

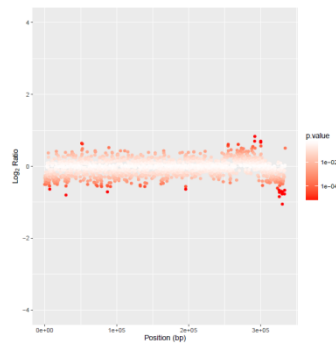


Gráficos comparativos de la cobertura de la cepa WT y la cepa resistente a miltefosina:

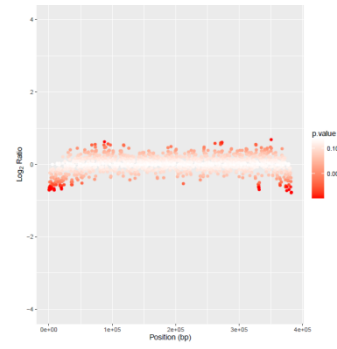
Cromosoma 1



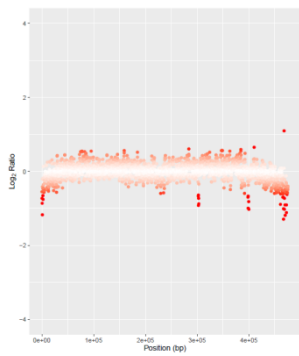
Cromosoma 2



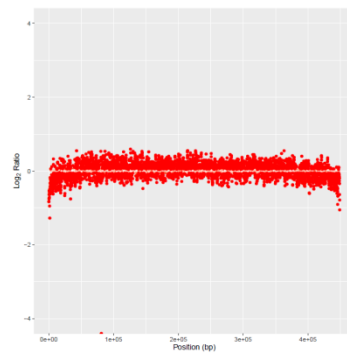
Cromosoma 3



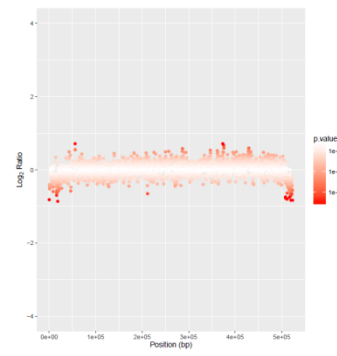
Cromosoma 4



Cromosoma 5



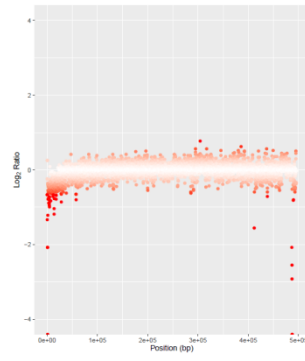
Cromosoma 6



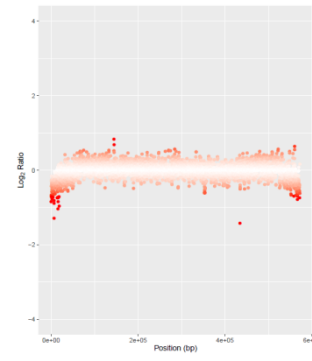
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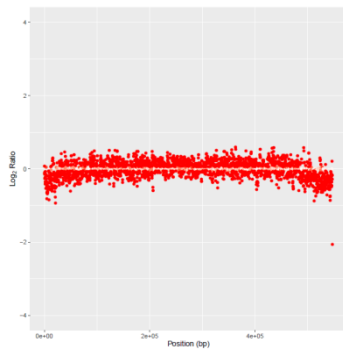
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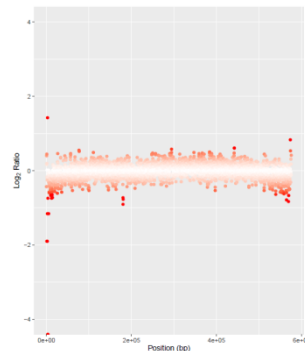
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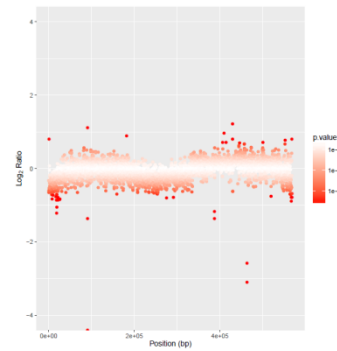
Cromosoma 10



Cromosoma 11



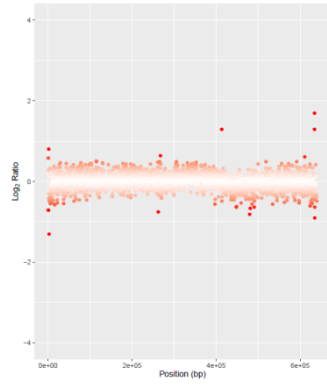
Cromosoma 12



Cromosoma 13



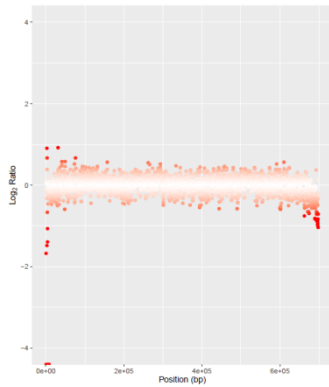
Cromosoma 14



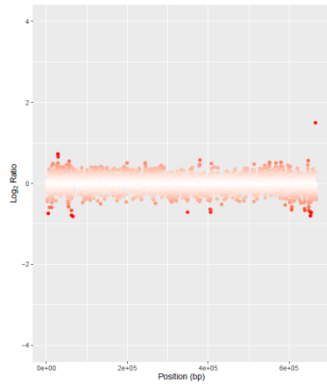
Cromosoma 15



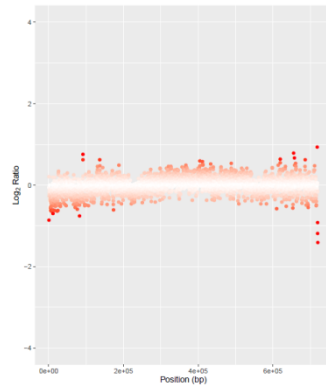
Cromosoma 16



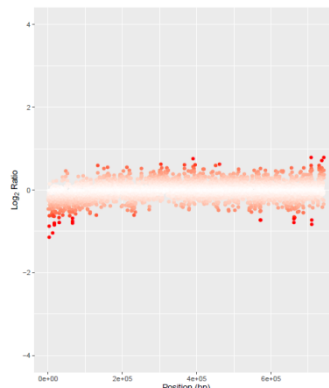
Cromosoma 17



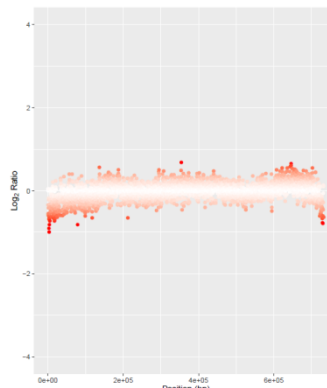
Cromosoma 18



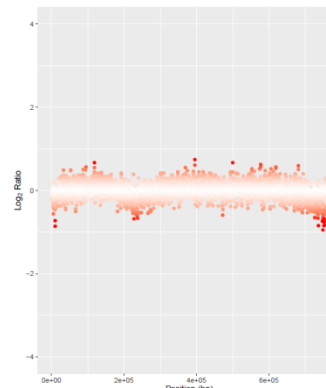
Cromosoma 19



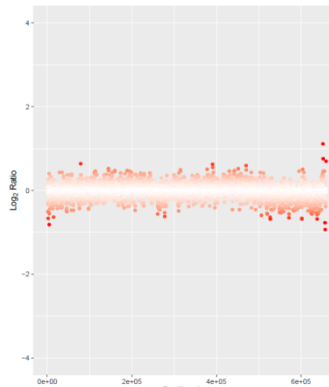
Cromosoma 20



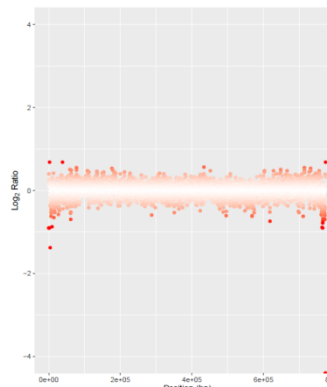
Cromosoma 21



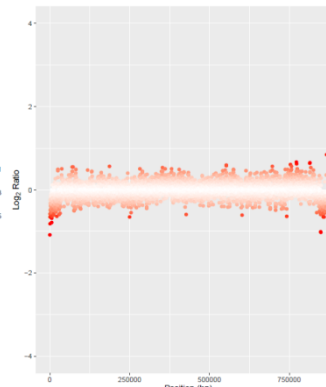
Cromosoma 22



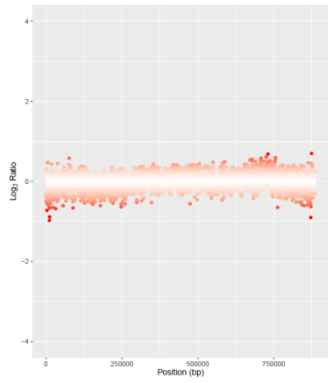
Cromosoma 23



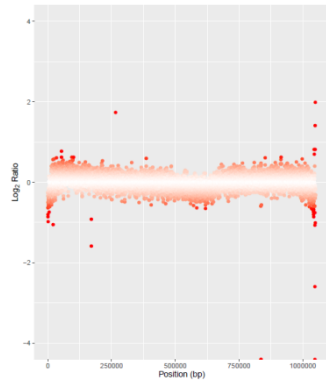
Cromosoma 24



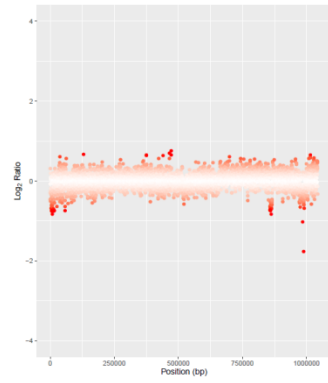
Cromosoma 25



Cromosoma 26



Cromosoma 27



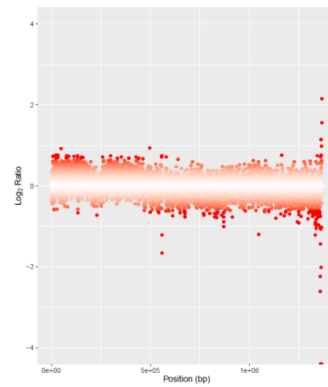
Cromosoma 28



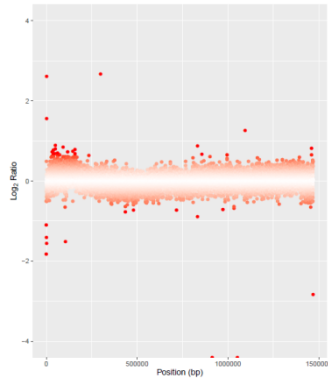
Cromosoma 29



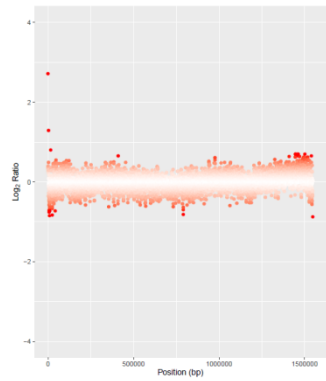
Cromosoma 30



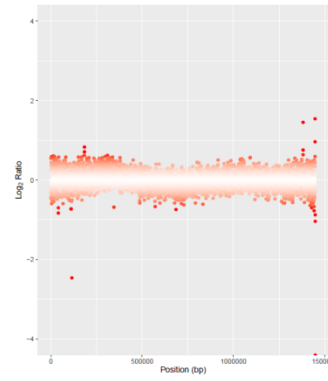
Cromosoma 31



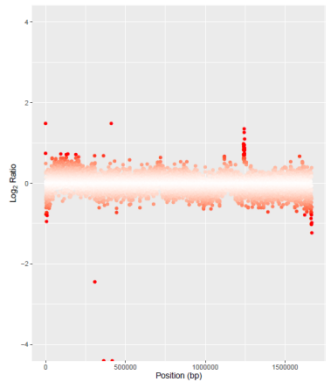
Cromosoma 32



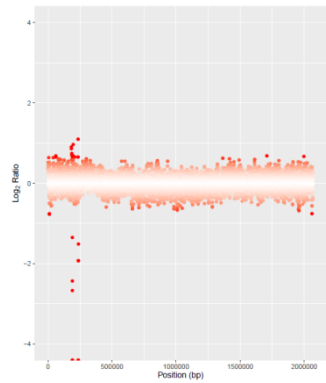
Cromosoma 33



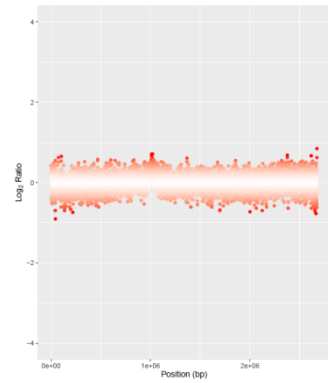
Cromosoma 34



Cromosoma 35

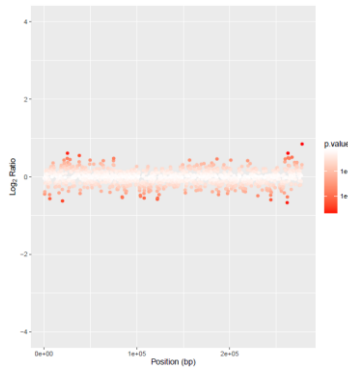


Cromosoma 36

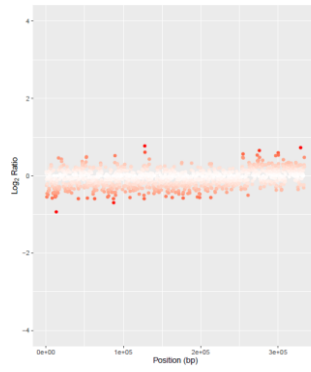


Gráficos comparativos de la cobertura de la cepa WT y la cepa resistente a paromomicina:

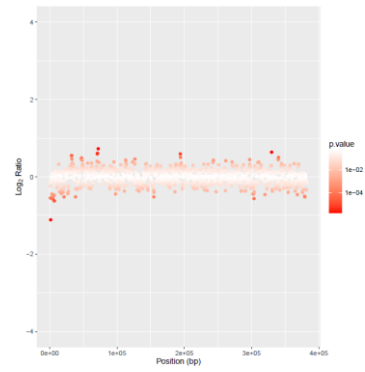
Cromosoma 1



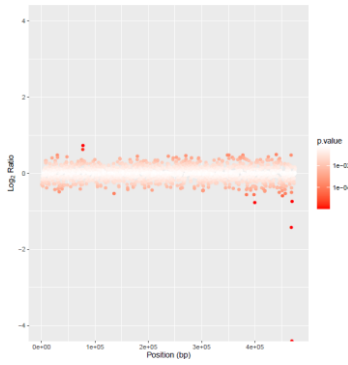
Cromosoma 2



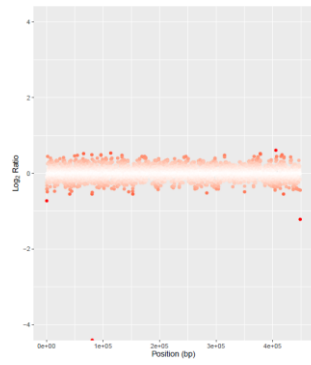
Cromosoma 3



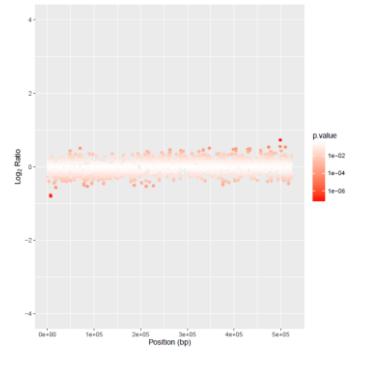
Cromosoma 4



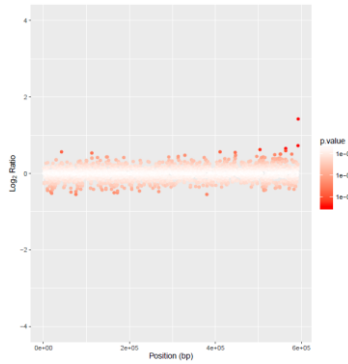
Cromosoma 5



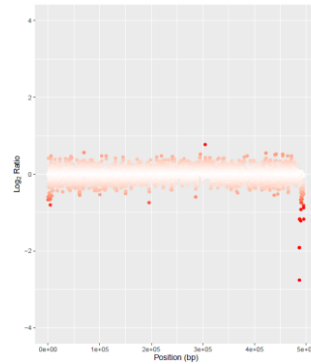
Cromosoma 6



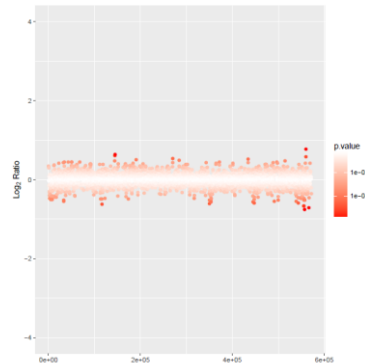
Cromosoma 7



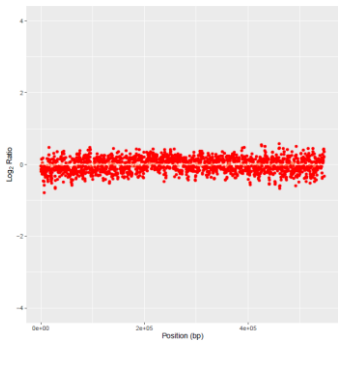
Cromosoma 8



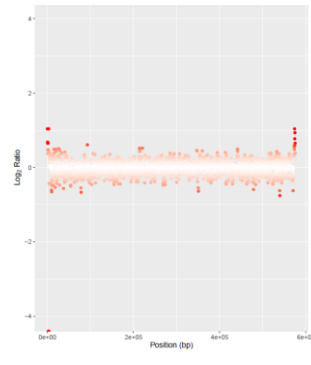
Cromosoma 9



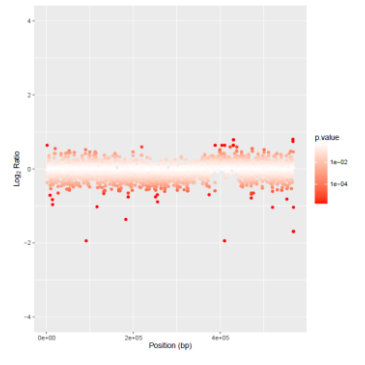
Cromosoma 10



Cromosoma 11



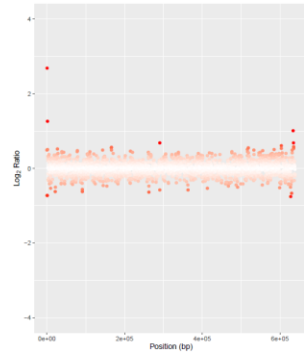
Cromosoma 12



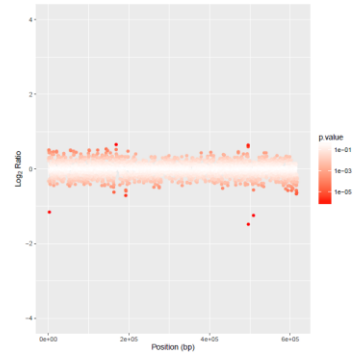
Cromosoma 13



Cromosoma 14



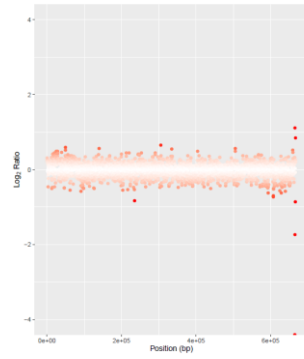
Cromosoma 15



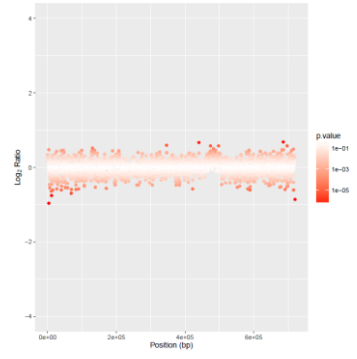
Cromosoma 16



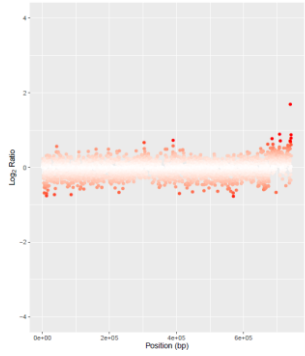
Cromosoma 17



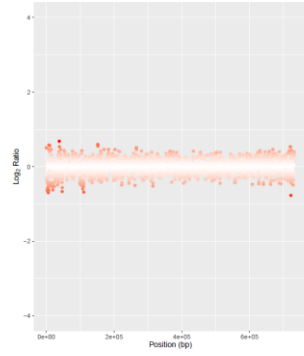
Cromosoma 18



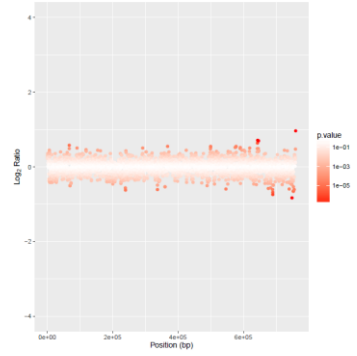
Cromosoma 19



Cromosoma 20



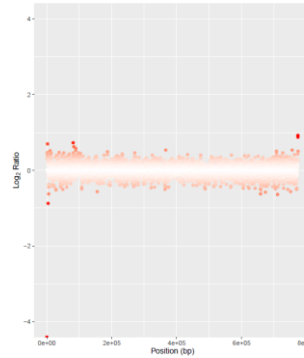
Cromosoma 21



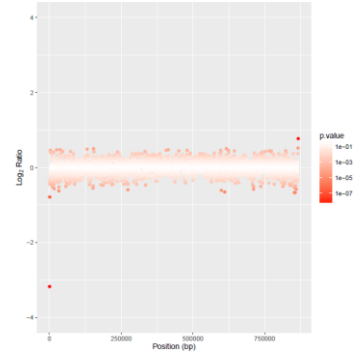
Cromosoma 22



Cromosoma 23

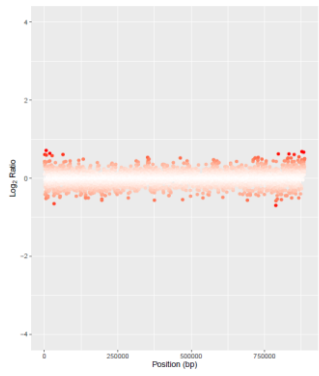


Cromosoma 24

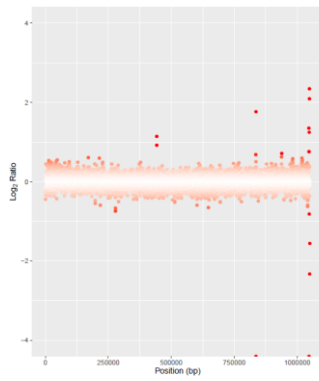




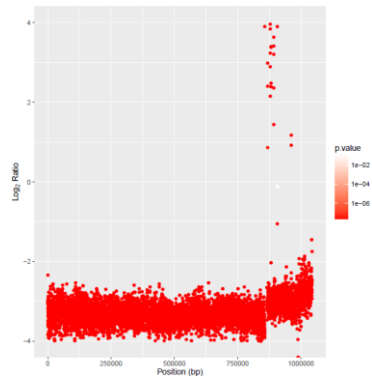
Cromosoma 25



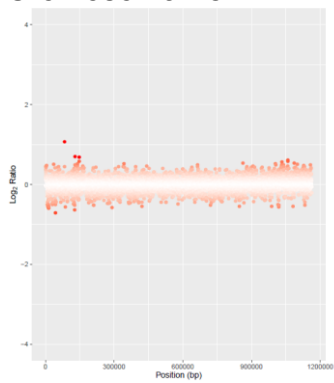
Cromosoma 26



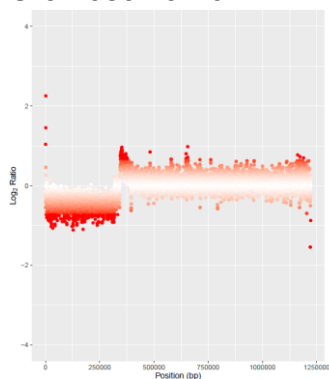
Cromosoma 27



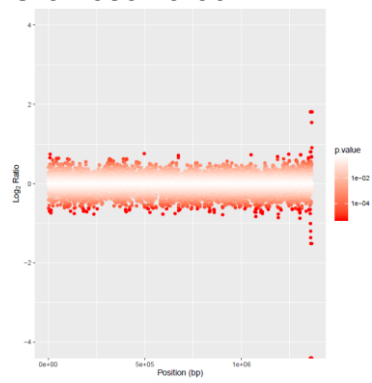
Cromosoma 28



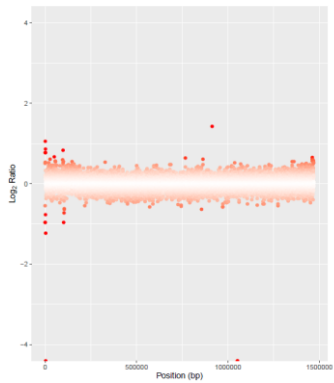
Cromosoma 29



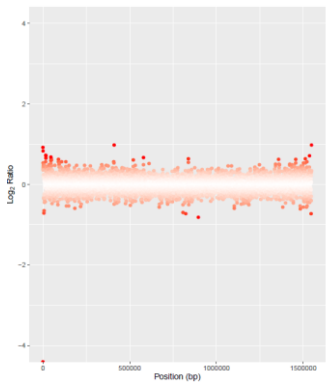
Cromosoma 30



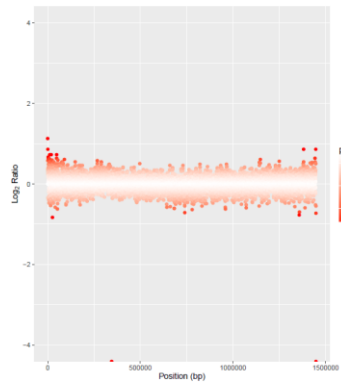
Cromosoma 31



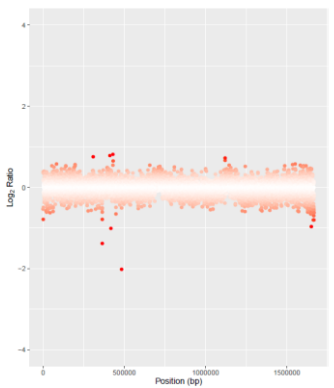
Cromosoma 32



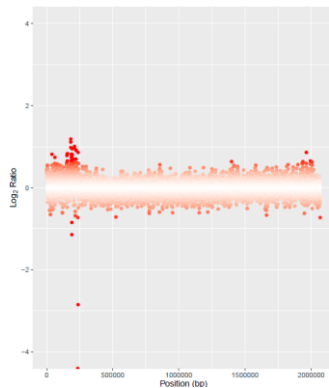
Cromosoma 33



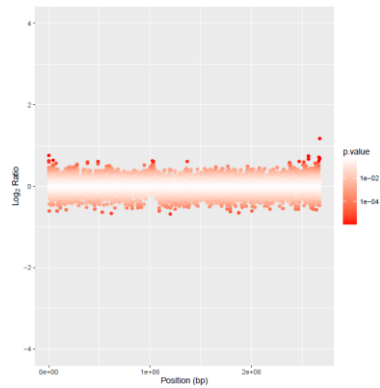
Cromosoma 34



Cromosoma 35

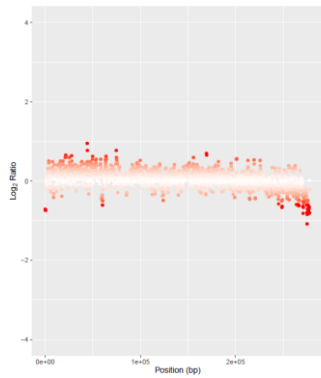


Cromosoma 36

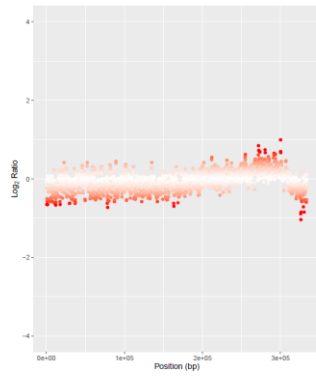


Gráficos comparativos de la cobertura de la cepa WT y la cepa resistente a antimoniales:

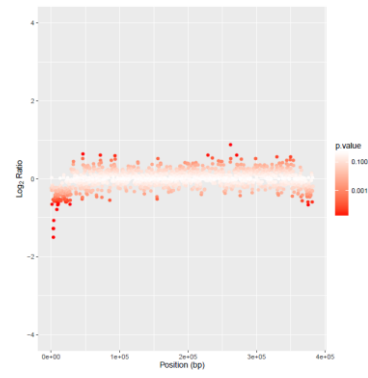
Cromosoma 1



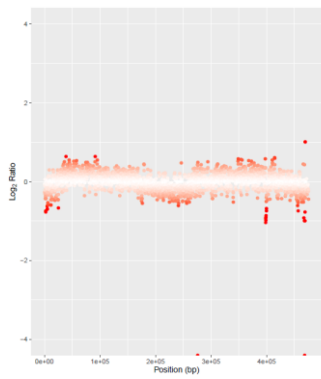
Cromosoma 2



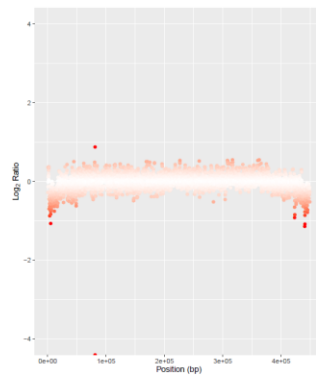
Cromosoma 3



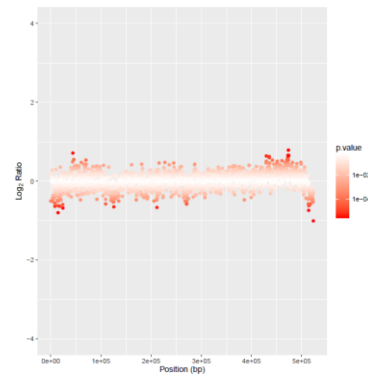
Cromosoma 4



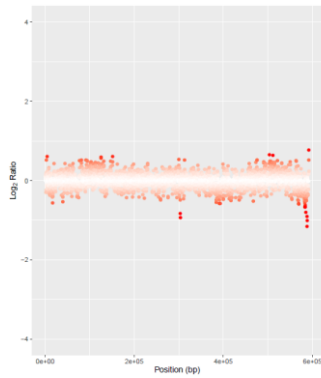
Cromosoma 5



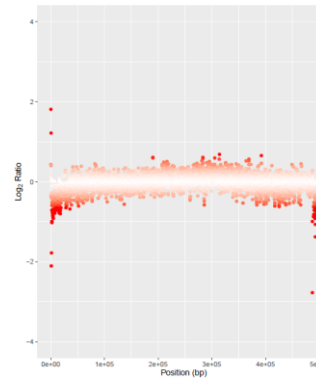
Cromosoma 6



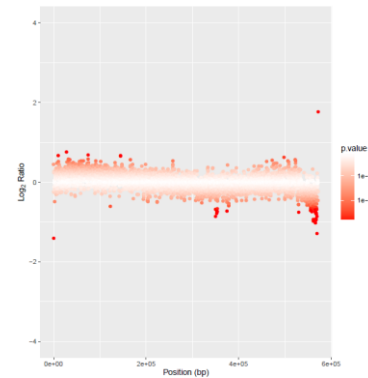
Cromosoma 7



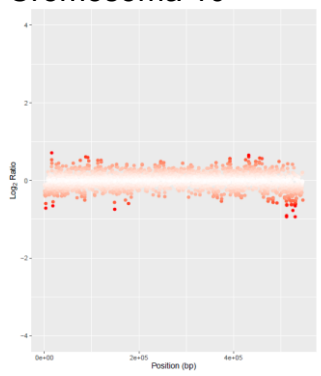
Cromosoma 8



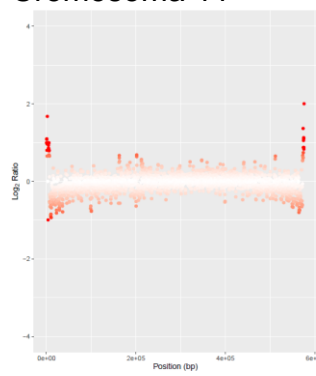
Cromosoma 9



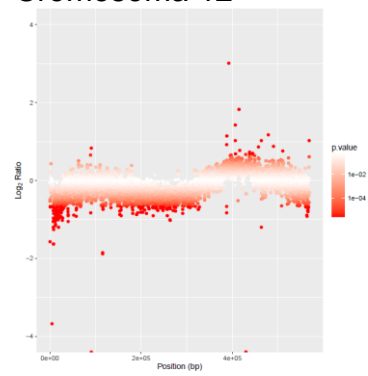
Cromosoma 10



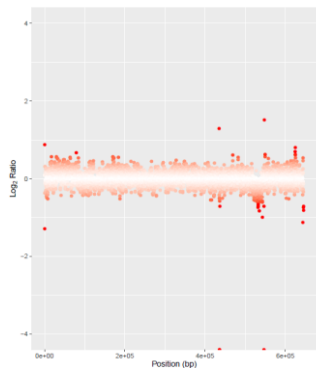
Cromosoma 11



Cromosoma 12



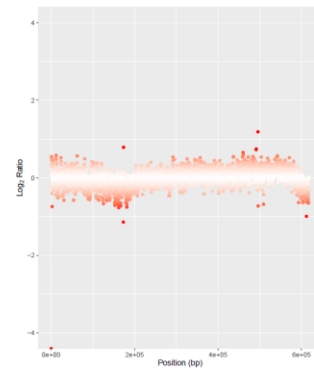
Cromosoma 13



Cromosoma 14



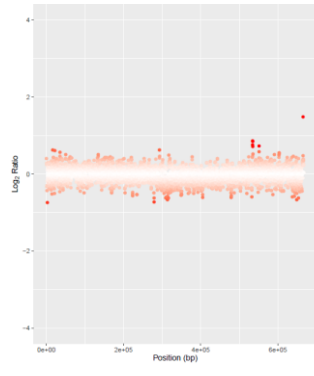
Cromosoma 15



Cromosoma 16



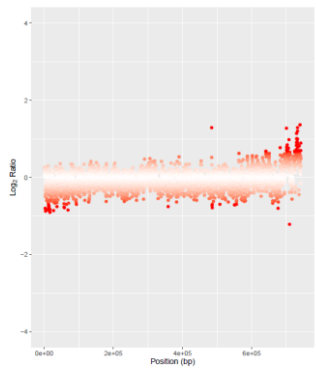
Cromosoma 17



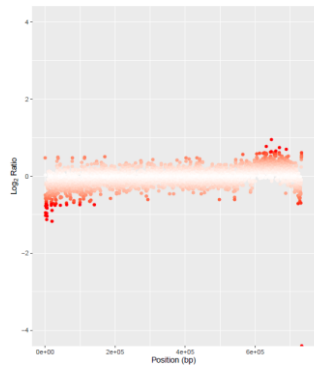
Cromosoma 18



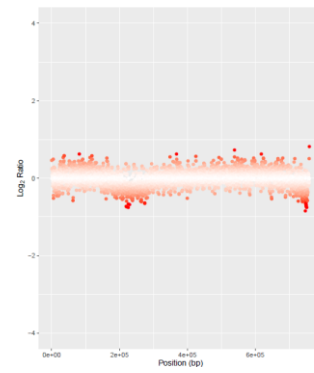
Cromosoma 19



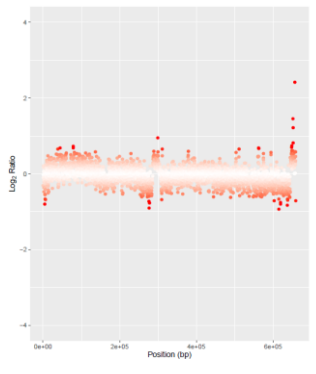
Cromosoma 20



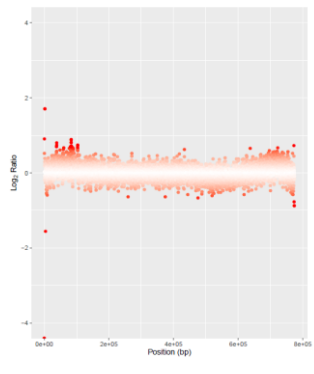
Cromosoma 21



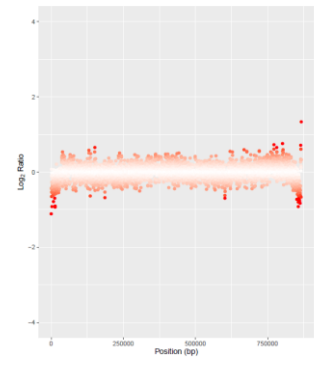
Cromosoma 22



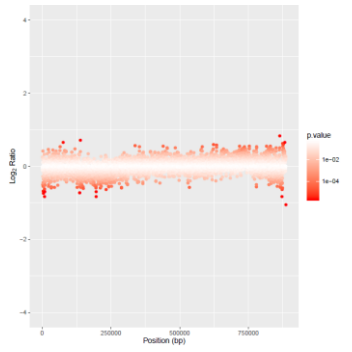
Cromosoma 23



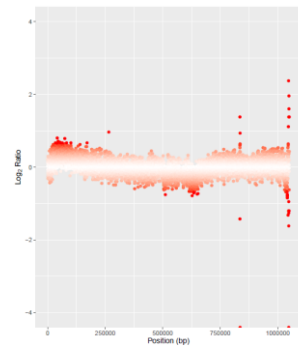
Cromosoma 24



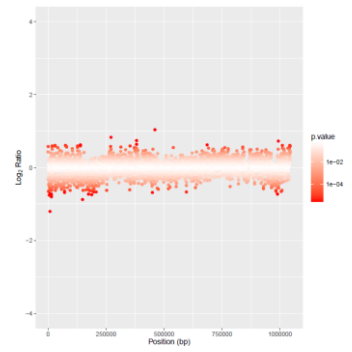
Cromosoma 25



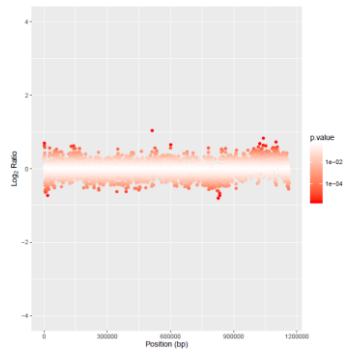
Cromosoma 26



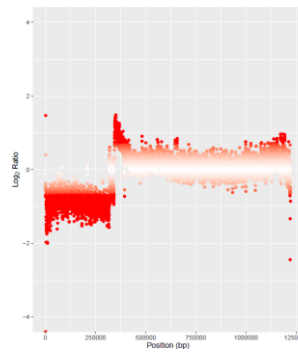
Cromosoma 27



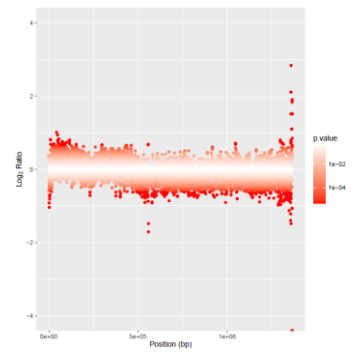
Cromosoma 28



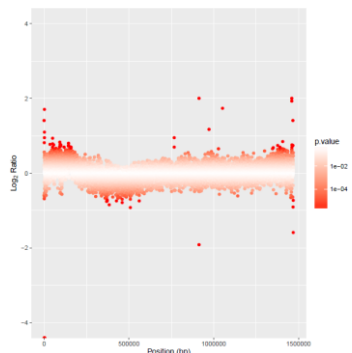
Cromosoma 29



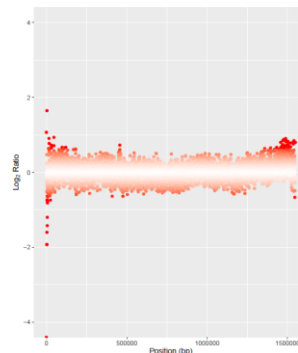
Cromosoma 30



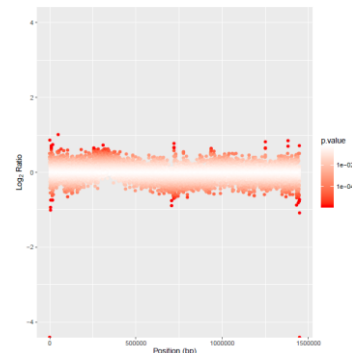
Cromosoma 31



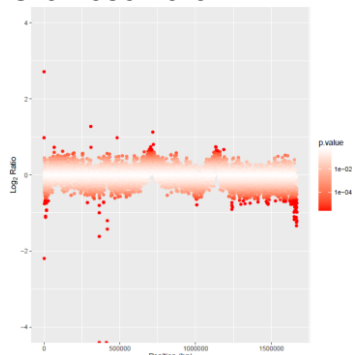
Cromosoma 32



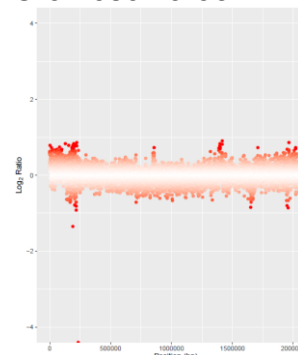
Cromosoma 33



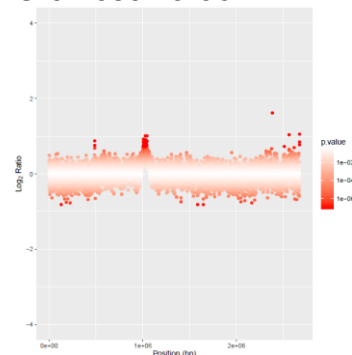
Cromosoma 34



Cromosoma 35



Cromosoma 36



## Anexo 2

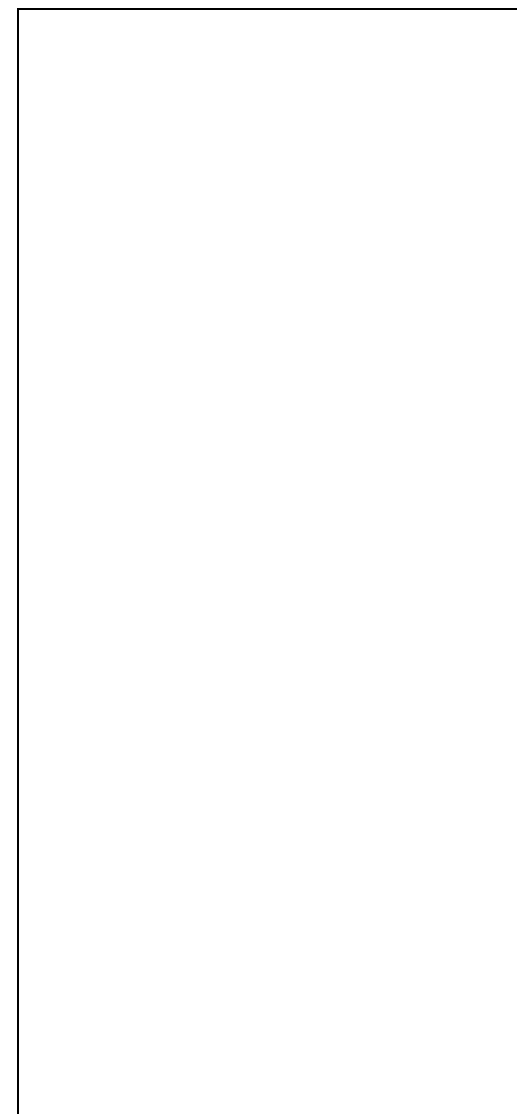
Lista de CNVs:

### Anfotericine

chromosome	cnv	start	end	size	log2	p.value	lose or gain (lgV)	gene	annotation
chrLinJ.11	CNVR_1	2048	2758	711	-Inf	9.399677e-167	+	LinJ11.0004	unknown reference
chrLinJ.14	CNVR_1	562425	563395	971	-0.6575195	2.07559e-18	-	LinJ14.1400	serine hydroxymethyltransferase (SHMT-S)
chrLinJ.18	CNVR_1	7199	8173	975	-0.8181175	2.705724e-26	-	LinJ18.0010	mitochondrial RNA binding protein 1
chrLinJ.20	CNVR_1	3070	4557	1488	-0.6977139	5.94E-039	-	LinJ20.0010	DNA-directed RNA polymerase III
chrLinJ.20	CNVR_2	5488	6231	744	-0.8242903	1.19E-026	-	LinJ20.0020	hypothetical protein
chrLinJ.29	CNVR_1	346169	359305	13137	0.9123217	0	+		consecutive CNVs in wide range of the chromosome
chrLinJ.29	CNVR_2	359457	361117	1661	0.7464301	2.48E-059			
chrLinJ.29	CNVR_3	361419	362325	907	0.7694821	7.18E-035			
chrLinJ.29	CNVR_4	363231	364589	1359	0.7082892	1.01E-044			

chrLinJ.29	CNVR_5	364893	367005	2113	0.7600297	2.38E-077	
chrLinJ.29	CNVR_6	367761	368969	1209	0.7263137	1.12E-041	
chrLinJ.29	CNVR_7	369121	370629	1509	0.7400108	2.56E-053	
chrLinJ.29	CNVR_8	370933	371535	603	0.6587272	1.81E-018	
chrLinJ.29	CNVR_9	373499	375159	1661	0.7496879	9.03E-060	
chrLinJ.29	CNVR_10	376217	376821	605	0.7549964	4.45E-023	
chrLinJ.29	CNVR_11	377425	378029	605	0.7628243	1.82E-023	
chrLinJ.29	CNVR_12	379841	380595	755	0.6488589	3.97E-022	
chrLinJ.29	CNVR_13	381201	381955	755	0.6649278	4.77E-023	
chrLinJ.29	CNVR_14	415175	415929	755	0.6368623	1.89E-021	
chrLinJ.29	CNVR_15	77	679	603	-0.8859995	3.25E-034	~1/3 of the chromosome
chrLinJ.29	CNVR_16	1737	8985	7249	-1.05099	0	
chrLinJ.29	CNVR_17	9137	11401	2265	-1.167232	1.19E-196	
chrLinJ.29	CNVR_18	11553	14421	2869	-1.134364	3.04E-237	
chrLinJ.29	CNVR_19	14723	20763	6041	-1.096803	0	
chrLinJ.29	CNVR_20	21217	21971	755	-0.9028211	1.01E-043	

chrLinJ.29	CNVR_21	22123	23631	1509	-0.9556569	1.82E-094
chrLinJ.29	CNVR_22	23783	27557	3775	-1.018793	2.90E-260
chrLinJ.29	CNVR_23	27861	28615	755	-0.8641508	1.47E-040
chrLinJ.29	CNVR_24	28767	32993	4227	-0.9983159	2.67E-281
chrLinJ.29	CNVR_25	33145	35863	2719	-0.8793002	1.26E-145
chrLinJ.29	CNVR_26	36165	37071	907	-0.7458203	2.51E-037
chrLinJ.29	CNVR_27	37525	44923	7399	-1.02315	0
chrLinJ.29	CNVR_28	45225	59419	14195	-0.9377673	0
chrLinJ.29	CNVR_29	59721	61381	1661	-0.938467	1.59E-100
chrLinJ.29	CNVR_30	61533	62439	907	-0.9626321	3.88E-058
chrLinJ.29	CNVR_31	62591	63495	905	-0.7584155	1.90E-038
chrLinJ.29	CNVR_32	63647	67421	3775	-0.9015054	1.54E-210
chrLinJ.29	CNVR_33	67573	70139	2567	-0.8327373	5.69E-125
chrLinJ.29	CNVR_34	70291	72555	2265	-0.9296803	3.72E-134
chrLinJ.29	CNVR_35	72707	75877	3171	-1.008448	3.45E-215
chrLinJ.29	CNVR_36	76181	83729	7549	-0.917449	0



chrLinJ.29	CNVR_37	84033	93997	9965	-1.035457	0
chrLinJ.29	CNVR_38	94149	95055	907	-0.7658791	4.05E-039
chrLinJ.29	CNVR_39	95659	96715	1057	-1.116402	2.10E-086
chrLinJ.29	CNVR_40	97019	105171	8153	-0.9455284	0
chrLinJ.29	CNVR_41	105475	112419	6945	-0.9308359	0
chrLinJ.29	CNVR_42	112571	114081	1511	-1.003421	1.18E-102
chrLinJ.29	CNVR_43	114233	122687	8455	-0.9949612	0
chrLinJ.29	CNVR_44	122839	126613	3775	-0.8050411	4.98E-172
chrLinJ.29	CNVR_45	126917	134617	7701	-0.9743816	0
chrLinJ.29	CNVR_46	134769	140959	6191	-0.9848477	0
chrLinJ.29	CNVR_47	141563	143827	2265	-0.9237926	1.11E-132
chrLinJ.29	CNVR_48	143979	146395	2417	-0.8950625	8.70E-134
chrLinJ.29	CNVR_49	146697	147753	1057	-0.8051731	1.53E-049
chrLinJ.29	CNVR_50	148661	152737	4077	-1.030404	2.23E-286
chrLinJ.29	CNVR_51	153039	154851	1813	-0.7866699	3.26E-080
chrLinJ.29	CNVR_52	155153	156663	1511	-0.8477689	1.09E-076

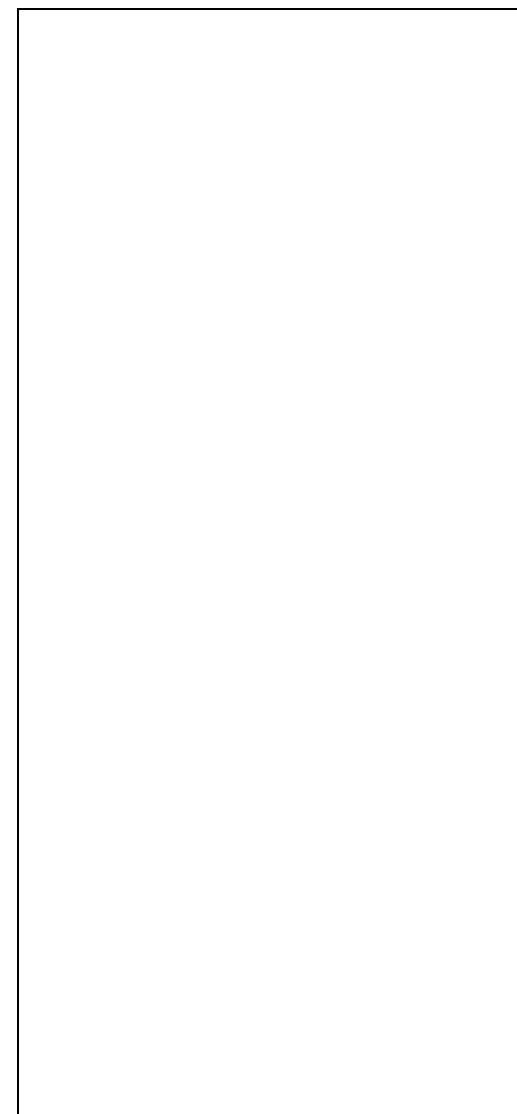




chrLinJ.29	CNVR_53	157117	163155	6039	-0.9460596	0
chrLinJ.29	CNVR_54	163307	165119	1813	-0.853969	7.77E-093
chrLinJ.29	CNVR_55	165573	166629	1057	-0.7238973	5.11E-041
chrLinJ.29	CNVR_56	166781	169195	2415	-0.914923	4.96E-139
chrLinJ.29	CNVR_57	169499	174481	4983	-0.9051119	3.43E-279
chrLinJ.29	CNVR_58	174633	179765	5133	-0.8815242	1.89E-274
chrLinJ.29	CNVR_59	179917	190939	11023	-0.9169757	0
chrLinJ.29	CNVR_60	191243	193507	2265	-1.008185	3.15E-154
chrLinJ.29	CNVR_61	193659	194563	905	-1.011718	3.28E-063
chrLinJ.29	CNVR_62	195169	200151	4983	-0.9695099	0
chrLinJ.29	CNVR_63	201057	203623	2567	-0.9257156	1.20E-150
chrLinJ.29	CNVR_64	203927	204983	1057	-0.9153109	6.06E-062
chrLinJ.29	CNVR_65	205135	207549	2415	-0.8650187	5.71E-126
chrLinJ.29	CNVR_66	207701	208757	1057	-0.9133712	1.02E-061
chrLinJ.29	CNVR_67	209513	225519	16007	-0.9225849	0
chrLinJ.29	CNVR_68	225671	227029	1359	-0.9075413	5.94E-078



chrLinJ.29	CNVR_69	227785	230199	2415	-0.9016334	1.63E-135
chrLinJ.29	CNVR_70	230653	248923	18271	-0.9668385	0
chrLinJ.29	CNVR_71	249227	261155	11929	-0.8951102	0
chrLinJ.29	CNVR_72	261457	274141	12685	-0.9528326	0
chrLinJ.29	CNVR_73	274293	276255	1963	-0.90959	3.47E-112
chrLinJ.29	CNVR_74	276407	277613	1207	-0.8561925	8.44E-063
chrLinJ.29	CNVR_75	277765	285617	7853	-0.9447434	0
chrLinJ.29	CNVR_76	286675	287579	905	-0.8992798	9.25E-052
chrLinJ.29	CNVR_77	287731	293771	6041	-0.9620338	0
chrLinJ.29	CNVR_78	294829	301773	6945	-0.9776544	0
chrLinJ.29	CNVR_79	301925	304039	2115	-0.8395502	9.01E-105
chrLinJ.29	CNVR_80	304493	309625	5133	-0.9680945	0
chrLinJ.29	CNVR_81	310079	311135	1057	-1.023184	7.78E-075
chrLinJ.29	CNVR_82	311287	318233	6947	-0.9788468	0
chrLinJ.29	CNVR_83	322915	323517	603	-0.6766036	1.79E-021
chrLinJ.29	CNVR_84	333031	333635	605	-0.7609795	2.40E-026



chrLinJ.29	CNVR_85	1218495	1221061	2567	-0.8200342	1.39E-121			
chrLinJ.29	CNVR_86	1221213	1221967	755	-0.8743197	2.20E-041			
chrLinJ.30	CNVR_1	1316270	1316979	710	-0.8511079	9.57E-042	-	LinJ30.3670	Protein of unknown function (DUF773)
chrLinJ.30	CNVR_2	1353900	1355177	1278	-0.9042051	4.46E-082	-	LinJ30.3800	ribosomal P protein AGP2beta-1
								LinJ30.3802	referencia desconocida
chrLinJ.34	CNVR_1	1651007	1651986	980	-0.7236999	1.686208e-26	-	LinJ34.4190	double RNA binding domain protein 7 (DRBD7)
chrLinJ.35	CNVR_1	182044	182947	904	0.7301773	9.132223e-25	+	-	
chrLinJ.36	CNVR_1	953471	958135	4665	-2.061748	0	-	LinJ36.2510	sterol 24-c-methyltransferase
								LinJ36.2520	sterol 24-c-methyltransferase

### Miltefosine

chromosome	cnv	start	end	size	log2	p.value	lose or gain (lgV)	gene	annotation
chrLinJ.03	CNVR_1	144	1288	1145	-0.69444	3.49E-020	-	LinJ03.0002	unknown reference
								LinJ03.0005	unknown reference
chrLinJ.04	CNVR_1	302065	303184	1120	-0.7474811	4.044393e-28	-	LinJ04.0785	unknown reference
chrLinJ.05	CNVR_1	57	616	560	-0.7875184	2.823855e-31	-	LinJ05.0002	unknown reference

chrLinJ.08	CNVR_1	892	1438	547	-1.866877	1.52E-084	-	LinJ08.0005	unknown reference
chrLinJ.08	CNVR_2	1988	2534	547	0.7041853	1.22E-020	-	-	-
chrLinJ.08	CNVR_3	3084	3630	547	0.7567334	3.13E-023	-	LinJ08.0007	unknown reference
chrLinJ.08	CNVR_4	4042	4864	823	0.8591024	5.76E-042	-	LinJ08.0010	adaptor complex protein (AP) 3 delta subunit 1
chrLinJ.08	CNVR_5	486694	487378	685	-3.210832	4.12E-166	-	LinJ08.1285	unknown reference
chrLinJ.09	CNVR_1	6498	7080	583	0.8809316	5.69E-030	-	LinJ09.0020	hypothetical protein
								LinJ09.0025	unknown reference
chrLinJ.09	CNVR_2	15696	16278	583	0.8390439	1.07E-027	-	LinJ09.0060	N-acetyl-D-glucosaminyolphosphatidylinositol de N-acetylase (GPI12)
								LinJ09.0070	endonuclease III
chrLinJ.09	CNVR_3	565970	566844	875	0.6788408	1.70E-028	-	LinJ09.1630	hypothetical protein
chrLinJ.10	CNVR_1	5265	6159	895	0.6510432	3.60581e-18	-	LinJ10.0014	unknown reference
								LinJ10.0016	unknown reference
chrLinJ.11	CNVR_1	3070	3814	745	0.8482208	9.594117e-28	-	LinJ11.0005	unknown reference
chrLinJ.12	CNVR_1	7141	8148	1008	0.7096525	1.75E-030	-	LinJ12.0000.5	unknown reference
								LinJ12.0000.6	unknown reference
chrLinJ.12	CNVR_2	18565	19236	672	0.9236221	5.20E-032	-	LinJ12.0007	MAR1 ribonuclease
chrLinJ.12	CNVR_3	21253	22092	840	0.7424496	1.08E-027	-	LinJ12.0008	hypothetical protein
								LinJ12.0009	hypothetical protein
chrLinJ.15	CNVR_1	616887	617707	821	0.6652721	5.523062e-23	-	LinJ15.1655	unknown reference

chrLinJ.16	CNVR_1	3430	4445	1016	-1.229297	4.83E-049	-	LinJ16.0003	unknown reference
chrLinJ.16	CNVR_2	693548	695325	1778	0.7725022	1.19E-040	-	LinJ16.1760	Flagellar Member 3 (FLAM3)
chrLinJ.16	CNVR_3	696088	697103	1016	0.8875837	6.23E-030	-	LinJ16.1763	unknown reference
chrLinJ.20	CNVR_1	2511	4899	2389	0.7177033	3.02E-050	-	LinJ20.0010	DNA-directed RNA polymerase III
chrLinJ.20	CNVR_2	728831	729787	957	-0.666582	9.46E-019	-	LinJ20.1780	hypothetical protein
								LinJ20.1790	hypothetical protein
chrLinJ.23	CNVR_1	765370	766017	648	0.7831895	2.528346e-24	-	LinJ23.1970	neutral sphingomyelinase activation associated factor-like protein
chrLinJ.26	CNVR_1	667	1257	591	0.8176593	2.93E-026	-	LinJ26.0006	unknown reference
								LinJ26.0010	Lsm7p protein
chrLinJ.26	CNVR_2	1047323	1047913	591	-1.124767	5.75E-043	-	LinJ26.2746	unknown reference
chrLinJ.27	CNVR_1	857434	860384	2951	0.6824385	2.59E-055	-	LinJ.27.1940	D-lactate dehydrogenase-like protein
chrLinJ.27	CNVR_2	861616	863090	1475	0.6878853	6.76E-029	-	LinJ.27.1940	D-lactate dehydrogenase-like protein
								LinJ.27.1950	branched-chain amino acid aminotransferase
chrLinJ.28	CNVR_1	12680	13864	1185	0.7833141	3.907267e-30	-	LinJ.28.0040	hypothetical protein
chrLinJ.30	CNVR_1	673849	674425	577	-0.713065	8.96E-024	-	LinJ30.1890	hypothetical protein
chrLinJ.30	CNVR_2	869689	870265	577	0.8311784	4.88E-031	-	LinJ30.2353	unknown reference

chrLinJ.30	CNVR_3	1330921	1331641	721	0.8816004 <sup>-</sup>	1.69E-042	-	LinJ30.3720	V-type ATPase, C subunit
chrLinJ.30	CNVR_4	1336393	1337113	721	0.8433705 <sup>-</sup>	2.34E-039	-	LinJ30.3750	Protein of unknown function (DUF3808)
chrLinJ.31	CNVR_1	799	1218	420	Inf	NA	+	LinJ31.0004	unknown reference
chrLinJ.34	CNVR_1	1240095	1240941	847	0.8732424	1.76E-034	+	LinJ.34.2960	hypothetical protein
chrLinJ.34	CNVR_2	1241155	1243697	2543	0.7676406	3.37E-079	+	LinJ.34.2965	unknown reference
chrLinJ.34	CNVR_3	1243911	1245393	1483	0.9297131	7.58E-066	+	LinJ.34. 2970	NAD dependent epimerase/dehydratase family (POMP27)
chrLinJ.34	CNVR_4	1246243	1247089	847	0.8627587	9.01E-034	+	LinJ.34.2970	NAD dependent epimerase/ dehydratase family (POMP27)
chrLinJ.34	CNVR_5	1663035	1664305	1271	0.7695095 <sup>-</sup>	7.89E-035	+	LinJ.34.4240	hypothetical protein
								LinJ.34.4250	cyclic nucleotide-binding domain containing protein
chrLinJ.35	CNVR_1	189825	191360	1536	-2.701311	1.18468e-166	-	-	-

### Paromomicin

chromosome	cnv	start	end	size	log2	p.value	lose or gain (lgV)	gene	annotation
chrLinJ.08	CNVR_1	486710	487454	745	-1.682261	2.87E-091	-	LinJ08.1285	unknown protein
chrLinJ.12	CNVR_1	429392	430226	835	0.7604331	3.393774e-28	+	LinJ.12.0670	surface antigen pprotein 2

chrLinJ.19	CNVR_1	739457	740481	1025	0.7590318	4.06431e-28	+	-	
chrLinJ.27	CNVR_1	857188	865743	8556	4.594543	0	+	LinJ.27.1930	hypothetical protein
								LinJ.27.1940	D-lactate dehydrogenase-like protein
								LinJ.27.1950	branched-chain amino acid aminotransferase
chrLinJ.27	CNVR_2	878302	878991	690	3.502052	7.25E-138	+	LinJ.27.1995	unknown protein
chrLinJ.27	CNVR_3	881338	881889	552	3.018804	2.40E-102	+	LinJ.27.2010	hypothetical protein
chrLinJ.27	CNVR_4	892378	893067	690	3.055558	2.39E-128	+	LinJ.27.2040	hypothetical protein
chrLinJ.27	CNVR_5	906454	907005	552	4.211159	4.09E-119	+	LinJ.27.2060	hypothetical protein
chrLinJ.27	CNVR_6	70	460299	460230	-3.304148	0		false positive	
chrLinJ.27	CNVR_7	460714	634869	174156	-3.36975	0		false positive	
chrLinJ.27	CNVR_8	635008	857187	222180	-3.357221	0		false positive	
chrLinJ.27	CNVR_9	865744	868365	2622	-3.048249	0		false positive	
chrLinJ.27	CNVR_10	868780	878301	9522	-3.007188	0		false positive	
chrLinJ.27	CNVR_11	878992	881337	2346	-2.951878	0		false positive	
chrLinJ.27	CNVR_12	881890	892377	10488	-3.023599	0		false positive	
chrLinJ.27	CNVR_13	893068	906453	13386	-2.933941	0		false positive	
chrLinJ.27	CNVR_14	907144	961653	54510	-2.962365	0		false positive	
chrLinJ.27	CNVR_15	961930	984699	22770	-3.038431	0		false positive	
chrLinJ.27	CNVR_16	984838	1043901	59064	-2.806715	0		false positive	
chrLinJ.29	CNVR_1	346087	348330	2244	0.7220089	2.54E-064	+	consecutive CNVs in wide range of the chromosome	
chrLinJ.29	CNVR_2	348943	350370	1428	0.7678764	1.96E-046			
chrLinJ.29	CNVR_3	350983	352614	1632	0.7886896	2.11E-055			
chrLinJ.29	CNVR_4	354043	354858	816	0.7691494	2.43E-027			
chrLinJ.29	CNVR_5	355267	356490	1224	0.6704367	2.00E-031			

chrLinJ.29	CNVR_6	9079	10506	1428	-0.6913063	1.08E-033
chrLinJ.29	CNVR_7	19687	20706	1020	-0.7318996	5.88E-027
chrLinJ.29	CNVR_8	25807	27030	1224	-0.8418447	2.92E-040
chrLinJ.29	CNVR_9	32539	33558	1020	-0.7322781	5.58E-027
chrLinJ.29	CNVR_10	40087	41310	1224	-0.7883705	3.48E-036
chrLinJ.29	CNVR_11	46819	47634	816	-0.6875783	8.90E-020
chrLinJ.29	CNVR_12	48859	49674	816	-0.7382977	3.35E-022
chrLinJ.29	CNVR_13	98431	99858	1428	-0.7658128	5.77E-040
chrLinJ.29	CNVR_14	106795	107610	816	-0.6583136	2.02E-018
chrLinJ.29	CNVR_15	126991	128010	1020	-0.9023156	8.63E-038
chrLinJ.29	CNVR_16	130051	130866	816	-0.7231891	1.81E-021
chrLinJ.29	CNVR_17	145351	146166	816	-0.8227481	2.02E-026
chrLinJ.29	CNVR_18	150451	151266	816	-0.7285149	1.00E-021
chrLinJ.29	CNVR_19	163303	164118	816	-0.6631364	1.21E-018
chrLinJ.29	CNVR_20	166975	167994	1020	-0.7734501	1.67E-029
chrLinJ.29	CNVR_21	171463	172278	816	-0.7808753	2.65E-024
chrLinJ.29	CNVR_22	172687	174114	1428	-0.8002867	5.65E-043
chrLinJ.29	CNVR_23	175543	176562	1020	-0.7364992	3.09E-027
chrLinJ.29	CNVR_24	181051	182886	1836	-0.7245998	2.26E-046
chrLinJ.29	CNVR_25	183295	184110	816	-0.6654231	9.52E-019
chrLinJ.29	CNVR_26	201451	202470	1020	-0.6745399	1.46E-023
chrLinJ.29	CNVR_27	214711	215526	816	-0.6385518	1.59E-017
chrLinJ.29	CNVR_28	217159	218586	1428	-0.696649	3.94E-034
chrLinJ.29	CNVR_29	240211	241434	1224	-0.655755	1.17E-026
chrLinJ.29	CNVR_30	243067	244086	1020	-0.7099316	1.22E-025
chrLinJ.29	CNVR_31	244699	245514	816	-0.7951428	5.10E-025
chrLinJ.29	CNVR_32	259387	261018	1632	-0.6997792	4.68E-039
chrLinJ.29	CNVR_33	262447	263262	816	-0.8016101	2.40E-025
chrLinJ.29	CNVR_34	267955	268770	816	-0.700384	2.22E-020
chrLinJ.29	CNVR_35	270607	271422	816	-0.6887893	7.81E-020
chrLinJ.29	CNVR_36	274279	275094	816	-0.6863833	1.01E-019
chrLinJ.29	CNVR_37	283051	283866	816	-0.6585846	1.96E-018

~1/3 of the chromosome



chrLinJ.29	CNVR_38	284071	285090	1020	-0.7229737	2.03E-026			
chrLinJ.29	CNVR_39	305083	305898	816	-0.8200111	2.78E-026			
chrLinJ.29	CNVR_40	306919	308754	1836	-0.745194	1.31E-048			
chrLinJ.29	CNVR_41	314467	315282	816	-0.8030197	2.04E-025			
chrLinJ.29	CNVR_42	315691	316914	1224	-0.6937237	2.74E-029			
chrLinJ.30	CNVR_1	1301847	1302451	605	-0.7329205	2.003002e-23	-	LinJ30.3610	cytochrome p450-like protein
chrLinJ.31	CNVR_1	736	1126	391	1.285871	4.396114e-73	+	LinJ31.0004	unknown protein
chrLinJ.35	CNVR_1	185758	187186	1429	0.6769659	5.71E-030	+	-	
chrLinJ.35	CNVR_2	192050	193192	1143	0.8485944	1.20E-036	+	LinJ35.0510.1	proteophosphoglycan ppg4

#### Antimonials

chromosome	cnv	start	end	size	log2	p.value	lose or gain (lgV)	gene	annotation
chrLinJ.01	CNVR_1	274636	275486	851	-0.722471	1.64E-031	-	LinJ01.0858	unknown reference
							-	LinJ01.0859	unknown reference
chrLinJ.01	CNVR_2	275996	277696	1701	-0.7108905	1.77E-059	-	LinJ01.0859	unknown reference
chrLinJ.03	CNVR_1	3078	4248	1171	-1.27877	3.257421e-53	-	LinJ03.0010.1	hypothetical protein
chrLinJ.04	CNVR_1	397934	399003	1070	-0.9466087	9.883288e-42	-	LinJ04.1090	hypothetical protein
chrLinJ.05	CNVR_1	3186	3706	521	-0.7116924	5.92E-021	-	LinJ05.0005	unknown reference

chrLinJ.05	CNVR_2	440246	440896	651	-0.8838748	8.48E-037	+	LinJ05.1210	surface antigen-like protein
chrLinJ.06	CNVR_1	472496	473522	1027	0.6768514	1.747279e-20	+	LinJ06.1180	hypothetical protein
chrLinJ.08	CNVR_1	3333	3875	543	-0.7677062	6.02E-024	-	LinJ08.0007	unknown reference
chrLinJ.08	CNVR_2	4013	4555	543	-0.7806666	1.30E-024	-	LinJ08.0007	unknown reference
chrLinJ.08	CNVR_3	14485	15027	543	-0.6852835	7.39E-020	-	LinJ08.0040	hypothetical protein
chrLinJ.08	CNVR_4	489397	490211	815	-0.8213192	2.93E-039	-	LinJ08.1290	beta tubulin
chrLinJ.08	CNVR_5	492253	493067	815	-0.9144544	8.45E-047	-	LinJ08.1300	histone deacetylase
chrLinJ.09	CNVR_1	560879	561467	589	-0.8071393	7.28E-026	-	LinJ09.1600	hypothetical protein
chrLinJ.09	CNVR_2	566907	567641	735	-0.8194798	1.01E-032	-	LinJ09.1630	hypothetical protein
							-	LinJ09.1640	hypothetical protein
chrLinJ.10	CNVR_1	512168	513052	885	-0.7828447	1.516562e-24	-	LinJ10.1370	Protein of unknown function (DUF1861)
chrLinJ.11	CNVR_1	129	2175	2047	0.9799978	1.50E-097	+	LinJ11.0002	unknown reference
							+	LinJ11.0004	unknown reference
chrLinJ.11	CNVR_2	3713	6527	2815	0.8300794	6.15E-098	+	LinJ11.0007	unknown reference
chrLinJ.11	CNVR_3	572801	575871	3071	0.7500763	5.82E-088	+	LinJ11.1374	unknown reference

								+	LinJ11.1375	unknown reference
								+	LinJ11.1376	unknown reference
								+	LinJ11.1377	unknown reference
chrLinJ.11	CNVR_4	9345	10367	1023	-0.8866684	3.26E-029	-		LinJ11.0020	Endoplasmic Reticulum-Golgi Intermediate Compartment (ERGIC)/Endoplasmic reticulum vesicle transporter
chrLinJ.11	CNVR_5	28289	29311	1023	-0.6779496	2.91E-019	-		LinJ11.0080	hypothetical protein
									LinJ11.0090	MORN repeat
chrLinJ.12	CNVR_1	6917	8892	1976	-0.9856583	9.17E-113			LinJ.12.0000.5	unknown reference
chrLinJ.12	CNVR_2	11781	12540	760	-0.9559611	2.29E-042			LinJ.12.0000.7	unknown reference
chrLinJ.12	CNVR_3	13605	14212	608	-0.8489713	3.08E-028	-		LinJ.12.0001	translation initiation factor EIF-2b alpha subunit

chrLinJ.12	CNVR_4	14365	15124	760	-0.8668932	4.17E-036
chrLinJ.12	CNVR_5	16493	17100	608	-0.6734015	3.37E-019
chrLinJ.12	CNVR_6	18621	19228	608	-1.00379	5.26E-037
chrLinJ.12	CNVR_7	21357	21964	608	-0.7491467	5.92E-023
chrLinJ.12	CNVR_8	24093	25156	1064	-0.7952901	4.19E-043
chrLinJ.12	CNVR_9	27285	27892	608	-0.8481886	3.39E-028

LinJ.12.0002	PITH domain-containing protein
LinJ.12.0003	proteasome beta-1 subunit
LinJ.12.0004	Mitochondrial Ribosomal Protein of Small Subunit 29
LinJ.12.0005	hypothetical protein
LinJ.12.0006	hypothetical protein
LinJ.12.0007	MAR1 ribonuclease
LinJ.12.0008	hypothetical protein
LinJ.12.0009	hypothetical protein
LinJ.12.0011	kinetoplastid kinetochore protein 6,kkt6
LinJ.12.0012	hypothetical protein
LinJ.12.0012.5	unknown reference

									LinJ.12.0013	Plus-3 domain/Zinc finger, C3HC4 type (RING finger)
chrLinJ.12	CNVR_10	39597	40356	760	-0.8618635	9.25E-036	-		LinJ.12.0015.5	hypothetical protein, unknown function
chrLinJ.12	CNVR_11	66805	67412	608	-0.6351267	2.13E-017	-		LinJ.12.0170	ubiquitin hydrolase
chrLinJ.12	CNVR_12	202693	203300	608	-0.7559811	2.64E-023			LinJ.12.0416	unknown reference
chrLinJ.12	CNVR_13	247685	248292	608	-0.7160231	2.78E-021			LinJ.12.0418	unknown reference
chrLinJ.12	CNVR_14	263037	263948	912	-0.8168376	6.56E-039	-		LinJ.12.0420.1	hypothetical protein, unknown function
									LinJ.12.0420.2	hypothetical protein, unknown function
									LinJ.12.0420.3	hypothetical protein, unknown function
									LinJ.12.0423.1	unknown reference
									LinJ.12.0423.2	unknown reference

							LinJ.12.0423.3	unknown reference
							LinJ.12.0424	unknown reference
							LinJ.12.0426.1	unknown reference
							LinJ.12.0426.2	unknown reference
							LinJ.12.0426.3	unknown reference
							LinJ.12.0430.1	hypothetical protein, unknown function
							LinJ.12.0430.2	hypothetical protein, unknown function
							LinJ.12.0430.3	hypothetical protein, unknown function
							LinJ.12.0438.1	unknown reference
							LinJ.12.0438.2	unknown reference
							LinJ.12.0439	unknown reference
							LinJ.12.0440	hypothetical protein, unknown function

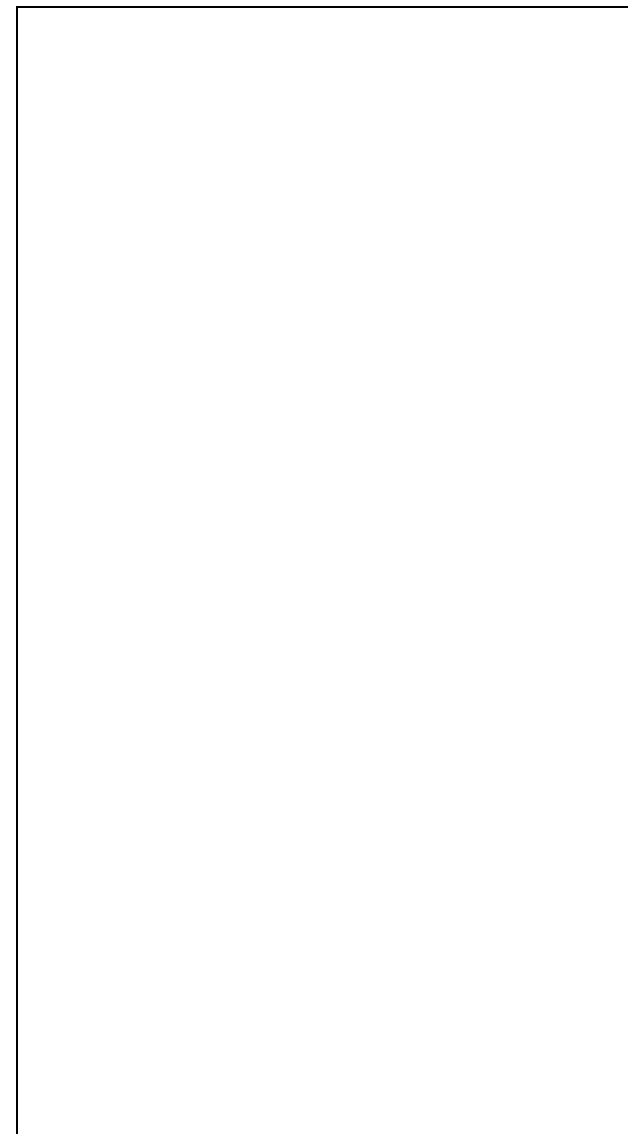
								LinJ.12.0445	unknown reference
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								LinJ.12.0449.2	unknown reference
								LinJ.12.0459	unknown reference
chrLinJ.13	CNVR_1	624812	625443	632	0.670526	1.231398e-20	+	LinJ13.1610	hypothetical protein, conserved
chrLinJ.15	CNVR_1	152897	154041	1145	-0.6461491	6.081382e-26	-	LinJ15.0460	hypothetical protein, conserved
								LinJ15.0470	hypothetical protein, conserved
chrLinJ.16	CNVR_1	2710	3998	1289	0.851149	3.845495e-39	+	LinJ16.0003	unknown reference
chrLinJ.17	CNVR_1	534468	535291	824	0.7967263	2.769642e-29	+	LinJ17.1235	unknown reference
chrLinJ.18	CNVR_1	719329	720287	959	-0.6488627	8.409051e-24	-	LinJ18.1678	unknown reference
chrLinJ.19	CNVR_1	641038	641893	856	0.6501269	1.46E-019	+	LinJ19.1540	Triose-phosphate Transporter family
chrLinJ.19	CNVR_2	702028	703953	1926	0.6719684	1.58E-044	+	-	

chrLinJ.19	CNVR_3	729206	730703	1498	0.8983523	2.92E-058	+	-	
chrLinJ.19	CNVR_4	731988	733699	1712	0.78744	9.90E-053	+	-	
chrLinJ.19	CNVR_5	12092	12947	856	-0.7471028	1.05E-022	-	LinJ19.0060	peroxin 13, putative (PEX13)
chrLinJ.20	CNVR_1	3241	4679	1439	-0.8138166	8.237408e-38	-	LinJ20.0010	DNA-directed RNA polymerase III
chrLinJ.21	CNVR_1	750173	751101	929	-0.7000747	2.148726e-20	-	LinJ21.2220	hypothetical protein, conserved
chrLinJ.23	CNVR_1	83022	83996	975	0.7509445	2.02E-046	+	LinJ23.0240	ATP-binding cassette protein subfamily C, member 2, putative (ABCC2)
chrLinJ.23	CNVR_2	88390	89120	731	0.6388144	1.32E-026	+	LinJ23.0265	unknown reference
								LinJ23.0267	unknown reference
chrLinJ.23	CNVR_3	103030	103638	609	0.6852254	2.47E-025	+	LinJ23.0300	argininosuccinate synthase
chrLinJ.24	CNVR_1	859918	861027	1110	-0.6589012	1.017213e-22	-	LinJ24.2425	unknown reference
								LinJ24.2430	SpoU rRNA Methylase family

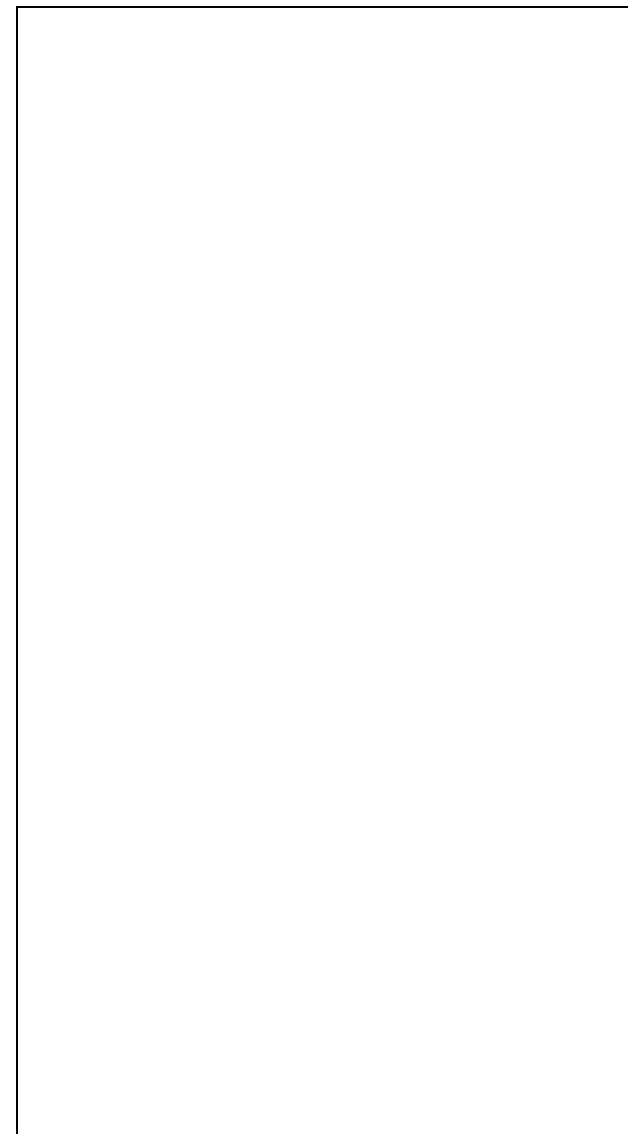


chrLinJ.26	CNVR_1	1041200	1041782	583	-0.793908	4.13E-025	-	LinJ26.2740	glutamate 5-kinase	
chrLinJ.26	CNVR_2	1047332	1047914	583	-1.324423	1.84E-054	-	LinJ26.2746	unknown reference	
chrLinJ.27	CNVR_1	14519	15495	977	-0.7305942	9.697135e-22	-	LinJ27.0050	DEAD-box helicase-like protein	
chrLinJ.29	CNVR_1	344813	367156	22344	1.018633	0	+	consecutive CNVs in wide range of the chromosome		
chrLinJ.29	CNVR_2	367309	372628	5320	0.791747	2.59E-204				
chrLinJ.29	CNVR_3	372933	375668	2736	0.7700763	3.72E-101				
chrLinJ.29	CNVR_4	375821	378100	2280	0.8195779	5.08E-094				
chrLinJ.29	CNVR_5	378253	380836	2584	0.7553593	1.54E-092				
chrLinJ.29	CNVR_6	380989	384636	3648	0.7525828	5.10E-129				
chrLinJ.29	CNVR_7	384789	385396	608	0.7571512	3.48E-023				
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chrLinJ.30	CNVR_3	538345	538919	575	-0.7607453	3.64E-027	-	LinJ30.1580	protein kinase
chrLinJ.30	CNVR_4	578809	579383	575	-0.8023134	8.24E-030	-	LinJ30.1675	unknown reference
chrLinJ.30	CNVR_5	1285705	1286279	575	-0.8259974	2.34E-031	-	LinJ30.3550	hypothetical protein, conserved
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chrLinJ.30	CNVR_7	1354249	1354967	719	-1.000621	5.98E-054	-	LinJ30.3800	ribosomal P protein AGP2beta-1, putative
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chrLinJ.34	CNVR_3	1659330	1660136	807	-0.7031188	1.34E-020	-	LinJ34.4230	1,2-Dihydroxy-3-keto-5-methylthiopentene dioxygenase
chrLinJ.34	CNVR_4	1660946	1662560	1615	-0.8227557	1.99E-051	-	LinJ34.4240	hypothetical protein, conserved
chrLinJ.34	CNVR_5	1665188	1666196	1009	-0.941853	1.08E-040	-	LinJ34.4250	cyclic nucleotide-binding domain containing protein
chrLinJ.35	CNVR_1	1398293	1399823	1531	0.701594	5.646372e-36	+	LinJ35.3526	unknown reference
								LinJ35.3530	hypothetical protein

chrLinJ.36	CNVR_1	1009002	1010667	1666	0.6683059	7.01E-038	+	LinJ36.2640	nucleoporin interacting component (NUP93)
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chrLinJ.36	CNVR_3	1021378	1029707	8330	0.7970678	1.85E-253	+	LinJ36.2690	hypothetical protein, conserved
								LinJ.36.2695	unknown reference
								LinJ36.2700	membrane-bound acid phosphatase precursor (MBAP)
								LinJ36.2705	unknown reference
chrLinJ.36	CNVR_4	1030184	1032325	2142	0.7714994	8.69E-063	+	LinJ36.2710	related to multifunctional cyclin-dependent kinase pho85-like protein

chrLinJ.36	CNVR_5	1043274	1044463	1190	0.8322104	7.92E-041	+	LinJ36.2740	folylpolyglutamate synthetase (FPGS)
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Lista de CNVs:

**Anfotericine**

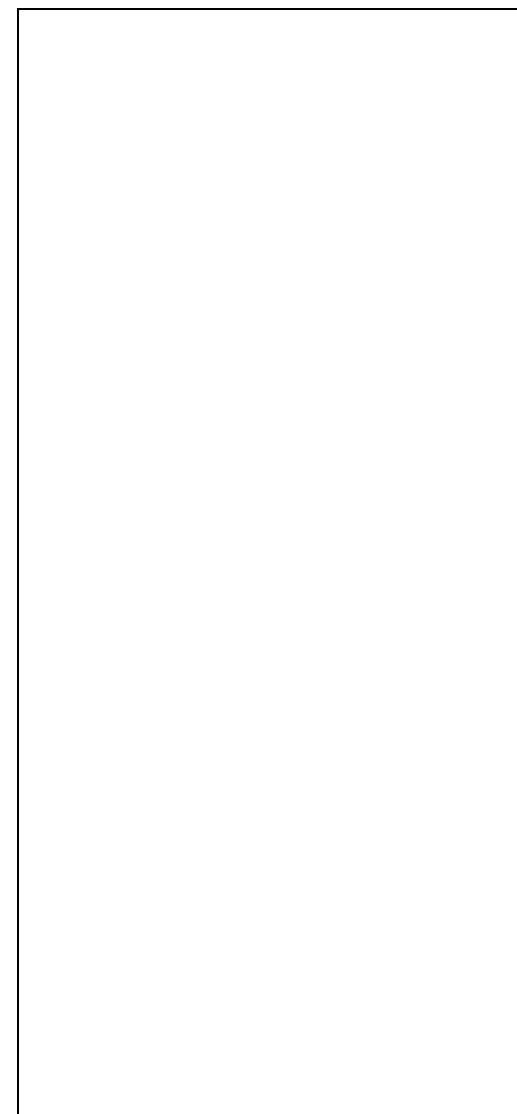
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chrLinJ.18	CNVR_1	7199	8173	975	-0.8181175	2.705724e-26	-	LinJ18.T0010	mitochondrial RNA binding protein 1
chrLinJ.20	CNVR_1	3070	4557	1488	-0.6977139	5.94E-039	-	LinJ20.T0010	DNA-directed RNA polymerase III
chrLinJ.20	CNVR_2	5488	6231	744	-0.8242903	1.19E-026	-	LinJ20.T0020	hypothetical protein
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chrLinJ.29	CNVR_4	363231	364589	1359	0.7082892	1.01E-044			
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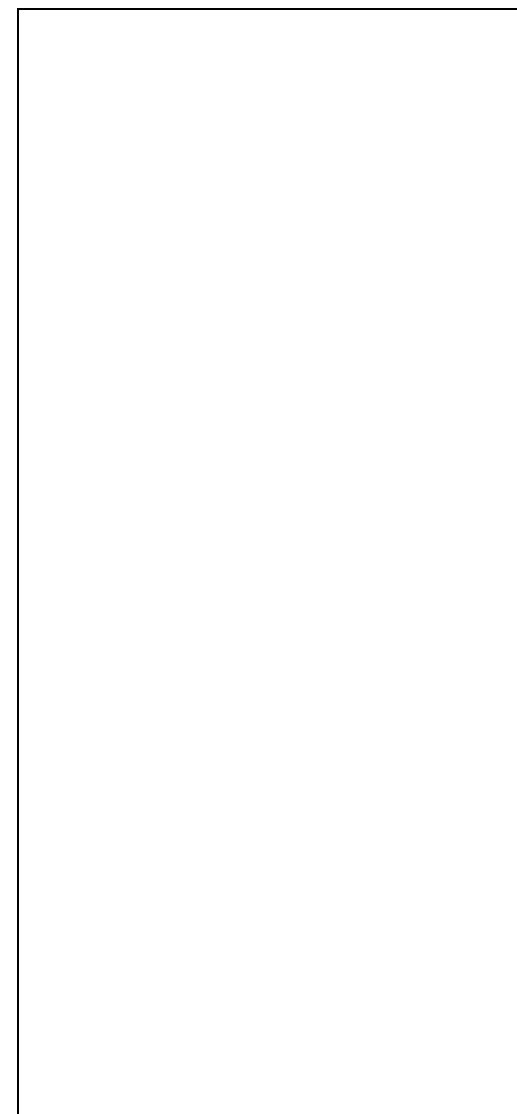
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~1/3 of the chromosome

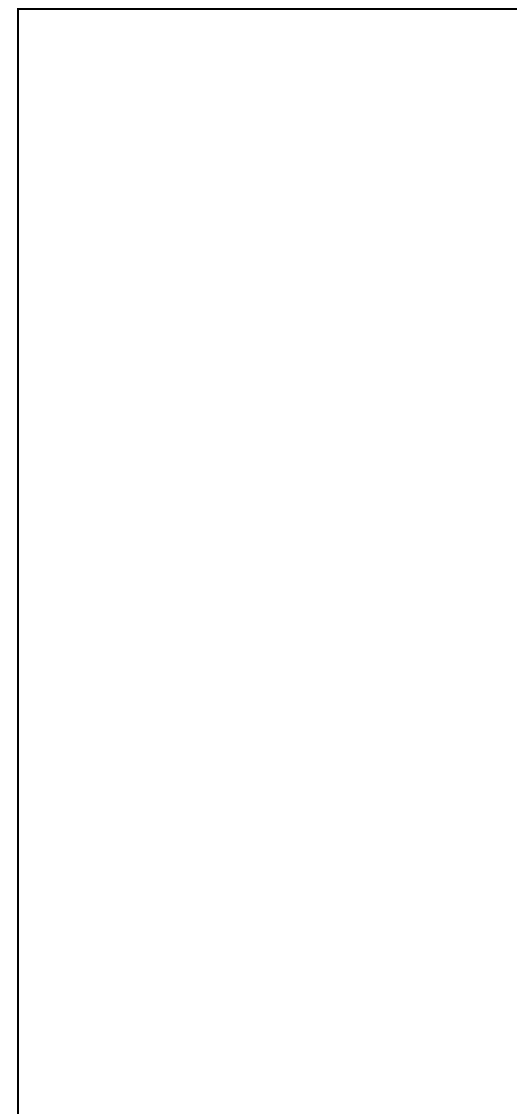
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chrLinJ.29	CNVR_54	163307	165119	1813	-0.853969	7.77E-093
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chrLinJ.29	CNVR_84	333031	333635	605	-0.7609795	2.40E-026
chrLinJ.29	CNVR_85	1218495	1221061	2567	-0.8200342	1.39E-121



chrLinJ.29	CNVR_86	1221213	1221967	755	-0.8743197	2.20E-041			
chrLinJ.30	CNVR_1	1316270	1316979	710	-0.8511079	9.57E-042	-	LinJ30.T3670	Protein of unknown function (DUF773)
chrLinJ.30	CNVR_2	1353900	1355177	1278	-0.9042051	4.46E-082	-	LinJ30.T3800	ribosomal P protein AGP2beta-1
								LinJ30.T3802	referencia desconocida
chrLinJ.34	CNVR_1	1651007	1651986	980	-0.7236999	1.686208e-26	-	LinJ34.T4190	double RNA binding domain protein 7 (DRBD7)
chrLinJ.35	CNVR_1	182044	182947	904	0.7301773	9.132223e-25	+	-	
chrLinJ.36	CNVR_1	953471	958135	4665	-2.061748	0	-	LinJ36.T2510	sterol 24-c-methyltransferase
								LinJ36.T2520	sterol 24-c-methyltransferase

### Miltefosine

chromosome	cnv	start	end	size	log2	p.value	lose or gain (lgV)	gene	annotation
chrLinJ.03	CNVR_1	144	1288	1145	-0.69444	3.49E-020	-	LinJ03.T0002	unknown reference
								LinJ03.T0005	unknown reference
chrLinJ.04	CNVR_1	302065	303184	1120	-0.7474811	4.044393e-28	-	LinJ04.T0785	unknown reference
chrLinJ.05	CNVR_1	57	616	560	-0.7875184	2.823855e-31	-	LinJ05.T0002	unknown reference
chrLinJ.08	CNVR_1	892	1438	547	-1.866877	1.52E-084	-	LinJ08.T0005	unknown reference
chrLinJ.08	CNVR_2	1988	2534	547	-0.7041853	1.22E-020	-	-	

chrLinJ.08	CNVR_3	3084	3630	547	0.7567334	3.13E-023	-	LinJ08.T0007	unknown reference
chrLinJ.08	CNVR_4	4042	4864	823	0.8591024	5.76E-042	-	LinJ08.T0010	adaptor complex protein (AP) 3 delta subunit 1
chrLinJ.08	CNVR_5	486694	487378	685	-3.210832	4.12E-166	-	LinJ08.T1285	unknown reference
chrLinJ.09	CNVR_1	6498	7080	583	0.8809316	5.69E-030	-	LinJ09.T0020	hypothetical protein
								LinJ09.T0025	unknown reference
chrLinJ.09	CNVR_2	15696	16278	583	0.8390439	1.07E-027	-	LinJ09.T0060	N-acetyl-D-glucosaminylphosphatidylinositol de N-acetylase (GPI12)
								LinJ09.T0070	endonuclease III
chrLinJ.09	CNVR_3	565970	566844	875	0.6788408	1.70E-028	-	LinJ09.T1630	hypothetical protein
chrLinJ.10	CNVR_1	5265	6159	895	0.6510432	3.60581e-18	-	LinJ10.T0014	unknown reference
								LinJ10.T0016	unknown reference
chrLinJ.11	CNVR_1	3070	3814	745	0.8482208	9.594117e-28	-	LinJ11.T0005	unknown reference
chrLinJ.12	CNVR_1	7141	8148	1008	0.7096525	1.75E-030	-	LinJ12.T0000.5	unknown reference
								LinJ12.T0000.6	unknown reference
chrLinJ.12	CNVR_2	18565	19236	672	0.9236221	5.20E-032	-	LinJ12.T0007	MAR1 ribonuclease
chrLinJ.12	CNVR_3	21253	22092	840	0.7424496	1.08E-027	-	LinJ12.T0008	hypothetical protein
								LinJ12.T0009	hypothetical protein
chrLinJ.15	CNVR_1	616887	617707	821	0.6652721	5.523062e-23	-	LinJ15.T1655	unknown reference
chrLinJ.16	CNVR_1	3430	4445	1016	-1.229297	4.83E-049	-	LinJ16.T0003	unknown reference
chrLinJ.16	CNVR_2	693548	695325	1778	0.7725022	1.19E-040	-	LinJ16.T1760	Flagellar Member 3 (FLAM3)

chrLinJ.16	CNVR_3	696088	697103	1016	0.8875837 <sup>-</sup>	6.23E-030	-	LinJ16.T1763	unknown reference
chrLinJ.20	CNVR_1	2511	4899	2389	0.7177033 <sup>-</sup>	3.02E-050	-	LinJ20.T0010	DNA-directed RNA polymerase III
chrLinJ.20	CNVR_2	728831	729787	957	-0.666582	9.46E-019	-	LinJ20.T1780	hypothetical protein
								LinJ20.T1790	hypothetical protein
chrLinJ.23	CNVR_1	765370	766017	648	-0.7831895 <sup>-</sup>	2.528346e-24	-	LinJ23.T1970	neutral sphingomyelinase activation associated factor-like protein
chrLinJ.26	CNVR_1	667	1257	591	0.8176593 <sup>-</sup>	2.93E-026	-	LinJ26.T0006	unknown reference
								LinJ26.T0010	Lsm7p protein
chrLinJ.26	CNVR_2	1047323	1047913	591	-1.124767 <sup>-</sup>	5.75E-043	-	LinJ26.T2746	unknown reference
chrLinJ.27	CNVR_1	857434	860384	2951	0.6824385 <sup>-</sup>	2.59E-055	-	LinJ.27.T1940	D-lactate dehydrogenase-like protein
chrLinJ.27	CNVR_2	861616	863090	1475	0.6878853 <sup>-</sup>	6.76E-029	-	LinJ.27.T1940	D-lactate dehydrogenase-like protein
								LinJ.27.T1950	branched-chain amino acid aminotransferase
chrLinJ.28	CNVR_1	12680	13864	1185	-0.7833141 <sup>-</sup>	3.907267e-30	-	LinJ.28.T0040	hypothetical protein
chrLinJ.30	CNVR_1	673849	674425	577	-0.713065 <sup>-</sup>	8.96E-024	-	LinJ30.T1890	hypothetical protein
chrLinJ.30	CNVR_2	869689	870265	577	0.8311784 <sup>-</sup>	4.88E-031	-	LinJ30.T2353	unknown reference
chrLinJ.30	CNVR_3	1330921	1331641	721	0.8816004 <sup>-</sup>	1.69E-042	-	LinJ30.T3720	V-type ATPase, C subunit
chrLinJ.30	CNVR_4	1336393	1337113	721	0.8433705 <sup>-</sup>	2.34E-039	-	LinJ30.T3750	Protein of unknown function (DUF3808)



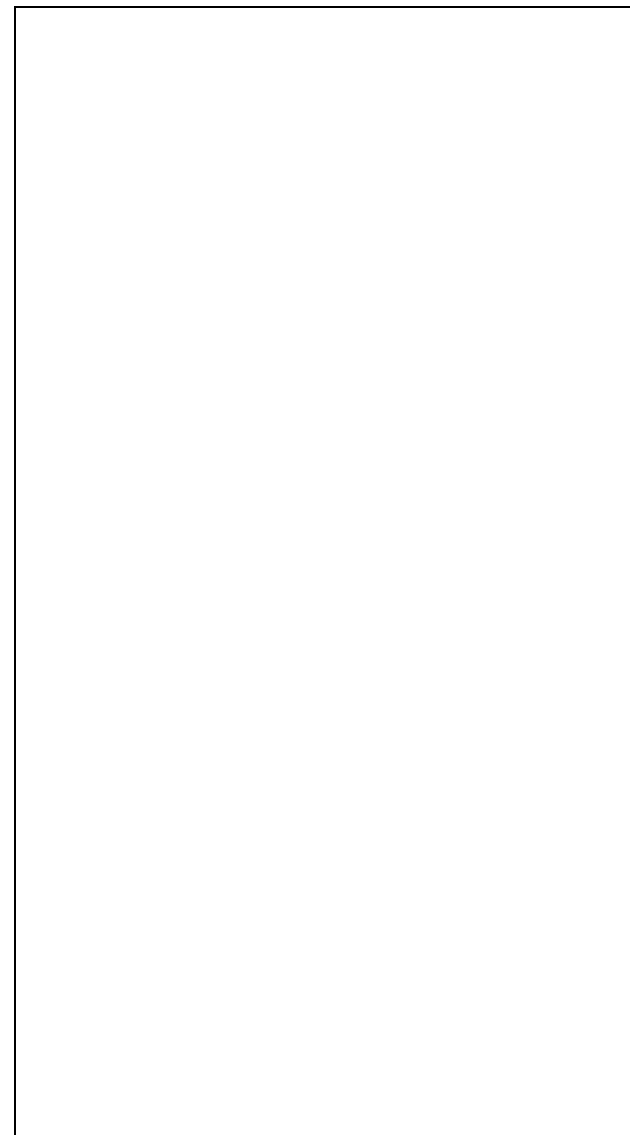
chrLinJ.31	CNVR_1	799	1218	420	Inf	NA	+	LinJ31.T0004	unknown reference
chrLinJ.34	CNVR_1	1240095	1240941	847	0.8732424	1.76E-034	+	LinJ.34.T2960	hypothetical protein
chrLinJ.34	CNVR_2	1241155	1243697	2543	0.7676406	3.37E-079	+	LinJ.34.T2965	unknown reference
chrLinJ.34	CNVR_3	1243911	1245393	1483	0.9297131	7.58E-066	+	LinJ.34.T2970	NAD dependent epimerase/dehydratase family (POMP27)
chrLinJ.34	CNVR_4	1246243	1247089	847	0.8627587	9.01E-034	+	LinJ.34.T2970	NAD dependent epimerase/ dehydratase family (POMP27)
chrLinJ.34	CNVR_5	1663035	1664305	1271	0.7695095	7.89E-035	+	LinJ.34.T4240	hypothetical protein
								LinJ.34.T4250	cyclic nucleotide-binding domain containing protein
chrLinJ.35	CNVR_1	189825	191360	1536	-2.701311	1.18468e-166	-	-	-

### Paromomicin

chromosome	cnv	start	end	size	log2	p.value	lose or gain (lgV)	gene	annotation
chrLinJ.08	CNVR_1	486710	487454	745	-1.682261	2.87E-091	-	LinJ08.T1285	unknown protein
chrLinJ.12	CNVR_1	429392	430226	835	0.7604331	3.393774e-28	+	LinJ.12.T0670	surface antigen pprotein 2
chrLinJ.19	CNVR_1	739457	740481	1025	0.7590318	4.06431e-28	+	-	-
chrLinJ.27	CNVR_1	857188	865743	8556	4.594543	0	+	LinJ.27.T1930	hypothetical protein

									LinJ.27.T1940	D-lactate dehydrogenase-like protein
									LinJ.27.T1950	branched-chain amino acid aminotransferase
chrLinJ.27	CNVR_2	878302	878991	690	3.502052	7.25E-138	+		LinJ.27.T1995	unknown protein
chrLinJ.27	CNVR_3	881338	881889	552	3.018804	2.40E-102	+		LinJ.27.T2010	hypothetical protein
chrLinJ.27	CNVR_4	892378	893067	690	3.055558	2.39E-128	+		LinJ.27.T2040	hypothetical protein
chrLinJ.27	CNVR_5	906454	907005	552	4.211159	4.09E-119	+		LinJ.27.T2060	hypothetical protein
chrLinJ.27	CNVR_6	70	460299	460230	-3.304148	0				false positive
chrLinJ.27	CNVR_7	460714	634869	174156	-3.36975	0				false positive
chrLinJ.27	CNVR_8	635008	857187	222180	-3.357221	0				false positive
chrLinJ.27	CNVR_9	865744	868365	2622	-3.048249	0				false positive
chrLinJ.27	CNVR_10	868780	878301	9522	-3.007188	0				false positive
chrLinJ.27	CNVR_11	878992	881337	2346	-2.951878	0				false positive
chrLinJ.27	CNVR_12	881890	892377	10488	-3.023599	0				false positive
chrLinJ.27	CNVR_13	893068	906453	13386	-2.933941	0				false positive
chrLinJ.27	CNVR_14	907144	961653	54510	-2.962365	0				false positive
chrLinJ.27	CNVR_15	961930	984699	22770	-3.038431	0				false positive
chrLinJ.27	CNVR_16	984838	1043901	59064	-2.806715	0				false positive
chrLinJ.29	CNVR_1	346087	348330	2244	0.7220089	2.54E-064				
chrLinJ.29	CNVR_2	348943	350370	1428	0.7678764	1.96E-046				
chrLinJ.29	CNVR_3	350983	352614	1632	0.7886896	2.11E-055	+			consecutive CNVs in wide range of the chromosome
chrLinJ.29	CNVR_4	354043	354858	816	0.7691494	2.43E-027				
chrLinJ.29	CNVR_5	355267	356490	1224	0.6704367	2.00E-031				
chrLinJ.29	CNVR_6	9079	10506	1428	-0.6913063	1.08E-033				
chrLinJ.29	CNVR_7	19687	20706	1020	-0.7318996	5.88E-027				
chrLinJ.29	CNVR_8	25807	27030	1224	-0.8418447	2.92E-040	-			~1/3 of the chromosome
chrLinJ.29	CNVR_9	32539	33558	1020	-0.7322781	5.58E-027				

chrLinJ.29	CNVR_10	40087	41310	1224	-0.7883705	3.48E-036
chrLinJ.29	CNVR_11	46819	47634	816	-0.6875783	8.90E-020
chrLinJ.29	CNVR_12	48859	49674	816	-0.7382977	3.35E-022
chrLinJ.29	CNVR_13	98431	99858	1428	-0.7658128	5.77E-040
chrLinJ.29	CNVR_14	106795	107610	816	-0.6583136	2.02E-018
chrLinJ.29	CNVR_15	126991	128010	1020	-0.9023156	8.63E-038
chrLinJ.29	CNVR_16	130051	130866	816	-0.7231891	1.81E-021
chrLinJ.29	CNVR_17	145351	146166	816	-0.8227481	2.02E-026
chrLinJ.29	CNVR_18	150451	151266	816	-0.7285149	1.00E-021
chrLinJ.29	CNVR_19	163303	164118	816	-0.6631364	1.21E-018
chrLinJ.29	CNVR_20	166975	167994	1020	-0.7734501	1.67E-029
chrLinJ.29	CNVR_21	171463	172278	816	-0.7808753	2.65E-024
chrLinJ.29	CNVR_22	172687	174114	1428	-0.8002867	5.65E-043
chrLinJ.29	CNVR_23	175543	176562	1020	-0.7364992	3.09E-027
chrLinJ.29	CNVR_24	181051	182886	1836	-0.7245998	2.26E-046
chrLinJ.29	CNVR_25	183295	184110	816	-0.6654231	9.52E-019
chrLinJ.29	CNVR_26	201451	202470	1020	-0.6745399	1.46E-023
chrLinJ.29	CNVR_27	214711	215526	816	-0.6385518	1.59E-017
chrLinJ.29	CNVR_28	217159	218586	1428	-0.696649	3.94E-034
chrLinJ.29	CNVR_29	240211	241434	1224	-0.655755	1.17E-026
chrLinJ.29	CNVR_30	243067	244086	1020	-0.7099316	1.22E-025
chrLinJ.29	CNVR_31	244699	245514	816	-0.7951428	5.10E-025
chrLinJ.29	CNVR_32	259387	261018	1632	-0.6997792	4.68E-039
chrLinJ.29	CNVR_33	262447	263262	816	-0.8016101	2.40E-025
chrLinJ.29	CNVR_34	267955	268770	816	-0.700384	2.22E-020
chrLinJ.29	CNVR_35	270607	271422	816	-0.6887893	7.81E-020
chrLinJ.29	CNVR_36	274279	275094	816	-0.6863833	1.01E-019
chrLinJ.29	CNVR_37	283051	283866	816	-0.6585846	1.96E-018
chrLinJ.29	CNVR_38	284071	285090	1020	-0.7229737	2.03E-026
chrLinJ.29	CNVR_39	305083	305898	816	-0.8200111	2.78E-026
chrLinJ.29	CNVR_40	306919	308754	1836	-0.745194	1.31E-048
chrLinJ.29	CNVR_41	314467	315282	816	-0.8030197	2.04E-025



chrLinJ.29	CNVR_42	315691	316914	1224	-0.6937237	2.74E-029			
chrLinJ.30	CNVR_1	1301847	1302451	605	-0.7329205	2.003002e-23	-	cytochrome p450-like protein	cytochrome p450-like protein
chrLinJ.31	CNVR_1	736	1126	391	1.285871	4.396114e-73	+	unknown protein	unknown protein
chrLinJ.35	CNVR_1	185758	187186	1429	0.6769659	5.71E-030	+	-	
chrLinJ.35	CNVR_2	192050	193192	1143	0.8485944	1.20E-036	+	proteophosphoglycan ppg4	proteophosphoglycan ppg4

### Antimonials

chromosome	cnv	start	end	size	log2	p.value	lose or gain (lgV)	gene	annotation
chrLinJ.01	CNVR_1	274636	275486	851	-0.722471	1.64E-031	-	LinJ01.T0858	unknown reference
							-	LinJ01.T0859	unknown reference
chrLinJ.01	CNVR_2	275996	277696	1701	-0.7108905	1.77E-059	-	LinJ01.T0859	unknown reference
chrLinJ.03	CNVR_1	3078	4248	1171	-1.27877	3.257421e-53	-	LinJ03.T0010.1	hypothetical protein
chrLinJ.04	CNVR_1	397934	399003	1070	-0.9466087	9.883288e-42	-	LinJ04.T1090	hypothetical protein
chrLinJ.05	CNVR_1	3186	3706	521	-0.7116924	5.92E-021	-	LinJ05.T0005	unknown reference
chrLinJ.05	CNVR_2	440246	440896	651	-0.8838748	8.48E-037	+	LinJ05.T1210	surface antigen-like protein
chrLinJ.06	CNVR_1	472496	473522	1027	0.6768514	1.747279e-20	+	LinJ06.T1180	hypothetical protein

chrLinJ.08	CNVR_1	3333	3875	543	-0.7677062	6.02E-024	-	LinJ08.T0007	unknown reference
chrLinJ.08	CNVR_2	4013	4555	543	-0.7806666	1.30E-024	-	LinJ08.T0007	unknown reference
chrLinJ.08	CNVR_3	14485	15027	543	-0.6852835	7.39E-020	-	LinJ08.T0040	hypothetical protein
chrLinJ.08	CNVR_4	489397	490211	815	-0.8213192	2.93E-039	-	LinJ08.1290	beta tubulin
chrLinJ.08	CNVR_5	492253	493067	815	-0.9144544	8.45E-047	-	LinJ08.T1300	histone deacetylase
chrLinJ.09	CNVR_1	560879	561467	589	-0.8071393	7.28E-026	-	LinJ09.T1600	hypothetical protein
chrLinJ.09	CNVR_2	566907	567641	735	-0.8194798	1.01E-032	-	LinJ09.T1630	hypothetical protein
							-	LinJ09.T1640	hypothetical protein
chrLinJ.10	CNVR_1	512168	513052	885	-0.7828447	1.516562e-24	-	LinJ10.T1370	Protein of unknown function (DUF1861)
chrLinJ.11	CNVR_1	129	2175	2047	0.9799978	1.50E-097	+	LinJ11.T0002	unknown reference
							+	LinJ11.T0004	unknown reference
chrLinJ.11	CNVR_2	3713	6527	2815	0.8300794	6.15E-098	+	LinJ11.T0007	unknown reference
chrLinJ.11	CNVR_3	572801	575871	3071	0.7500763	5.82E-088	+	LinJ11.T1374	unknown reference
							+	LinJ11.T1375	unknown reference
							+	LinJ11.T1376	unknown reference

							+	LinJ11.T1377	unknown reference
chrLinJ.11	CNVR_4	9345	10367	1023	-0.8866684	3.26E-029	-	LinJ11.T0020	Endoplasmic Reticulum-Golgi Intermediate Compartment (ERGIC)/Endoplasmic reticulum vesicle transporter
chrLinJ.11	CNVR_5	28289	29311	1023	-0.6779496	2.91E-019	-	LinJ11.T0080	hypothetical protein
								LinJ11.T0090	MORN repeat
chrLinJ.12	CNVR_1	6917	8892	1976	-0.9856583	9.17E-113	-	LinJ.12.T0000.5	unknown reference
chrLinJ.12	CNVR_2	11781	12540	760	-0.9559611	2.29E-042		LinJ.12.T0000.7	unknown reference
chrLinJ.12	CNVR_3	13605	14212	608	-0.8489713	3.08E-028		LinJ.12.T0001	translation initiation factor EIF-2b alpha subunit
chrLinJ.12	CNVR_4	14365	15124	760	-0.8668932	4.17E-036		LinJ.12.T0002	PITH domain-containing protein
chrLinJ.12	CNVR_5	16493	17100	608	-0.6734015	3.37E-019		LinJ.12.T0003	proteasome beta-1 subunit

chrLinJ.12	CNVR_6	18621	19228	608	-1.00379	5.26E-037		LinJ.12.T0004	Mitochondrial Ribosomal Protein of Small Subunit 29
chrLinJ.12	CNVR_7	21357	21964	608	-0.7491467	5.92E-023		LinJ.12.T0005	hypothetical protein
chrLinJ.12	CNVR_8	24093	25156	1064	-0.7952901	4.19E-043		LinJ.12.T0006	hypothetical protein
chrLinJ.12	CNVR_9	27285	27892	608	-0.8481886	3.39E-028		LinJ.12.T0007	MAR1 ribonuclease
								LinJ.12.T0008	hypothetical protein
								LinJ.12.T0009	hypothetical protein
								LinJ.12.T0011	kinetoplastid kinetochore protein 6,kkt6
								LinJ.12.T0012	hypothetical protein
								LinJ.12.T0012.5	unknown reference
								LinJ.12.T0013	Plus-3 domain/Zinc finger, C3HC4 type (RING finger)
chrLinJ.12	CNVR_10	39597	40356	760	-0.8618635	9.25E-036	-	LinJ.12.T0015.5	hypothetical protein, unknown function

chrLinJ.12	CNVR_11	66805	67412	608	-0.6351267	2.13E-017	-	LinJ.12.T0170	ubiquitin hydrolase
chrLinJ.12	CNVR_12	202693	203300	608	-0.7559811	2.64E-023		LinJ.12.T0416	unknown reference
chrLinJ.12	CNVR_13	247685	248292	608	-0.7160231	2.78E-021		LinJ.12.T0418	unknown reference
chrLinJ.12	CNVR_14	263037	263948	912	-0.8168376	6.56E-039	-	LinJ.12.T0420.1	hypothetical protein, unknown function
								LinJ.12.T0420.2	hypothetical protein, unknown function
								LinJ.12.T0420.3	hypothetical protein, unknown function
								LinJ.12.T0423.1	unknown reference
								LinJ.12.T0423.2	unknown reference
								LinJ.12.T0423.3	unknown reference
								LinJ.12.T0424	unknown reference
								LinJ.12.T0426.1	unknown reference
								LinJ.12.T0426.2	unknown reference
								LinJ.12.T0426.3	unknown reference



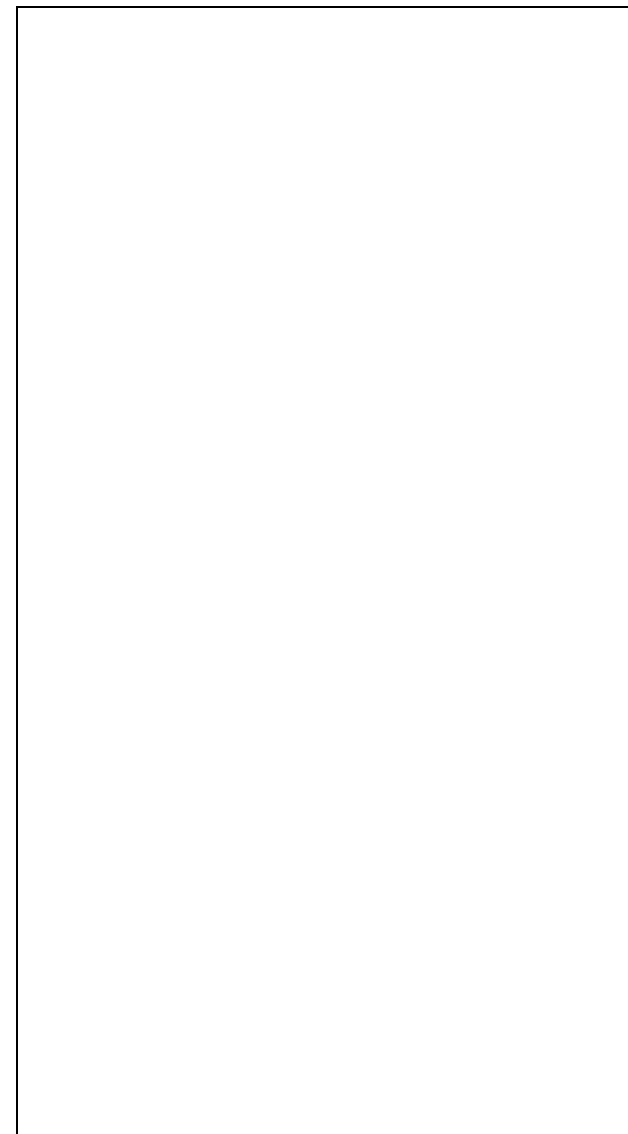
							LinJ.12.T0430.1	hypothetical protein, unknown function
							LinJ.12.T0430.2	hypothetical protein, unknown function
							LinJ.12.T0430.3	hypothetical protein, unknown function
							LinJ.12.T0438.1	unknown reference
							LinJ.12.T0438.2	unknown reference
							LinJ.12.T0439	unknown reference
							LinJ.12.T0440	hypothetical protein, unknown function
							LinJ.12.T0445	unknown reference
							LinJ.12.T0447	unknown reference
							LinJ.12.T0448	unknown reference
							LinJ.12.T0449.1	unknown reference
							LinJ.12.T0449.2	unknown reference

									LinJ.12.T0459	unknown reference
chrLinJ.13	CNVR_1	624812	625443	632	0.670526	1.231398e-20	+		LinJ13.T1610	hypothetical protein, conserved
chrLinJ.15	CNVR_1	152897	154041	1145	-0.6461491	6.081382e-26	-		LinJ15.T0460	hypothetical protein, conserved
									LinJ15.T0470	hypothetical protein, conserved
chrLinJ.16	CNVR_1	2710	3998	1289	0.851149	3.845495e-39	+		LinJ16.T0003	unknown reference
chrLinJ.17	CNVR_1	534468	535291	824	0.7967263	2.769642e-29	+		LinJ17.T1235	unknown reference
chrLinJ.18	CNVR_1	719329	720287	959	-0.6488627	8.409051e-24	-		LinJ18.T1678	unknown reference
chrLinJ.19	CNVR_1	641038	641893	856	0.6501269	1.46E-019	+		LinJ19.T1540	Triose-phosphate Transporter family
chrLinJ.19	CNVR_2	702028	703953	1926	0.6719684	1.58E-044	+	-		
chrLinJ.19	CNVR_3	729206	730703	1498	0.8983523	2.92E-058	+	-		
chrLinJ.19	CNVR_4	731988	733699	1712	0.78744	9.90E-053	+	-		
chrLinJ.19	CNVR_5	12092	12947	856	-0.7471028	1.05E-022	-		LinJ19.T0060	peroxin 13, putative (PEX13)
chrLinJ.20	CNVR_1	3241	4679	1439	-0.8138166	8.237408e-38	-		LinJ20.T0010	DNA-directed RNA polymerase III

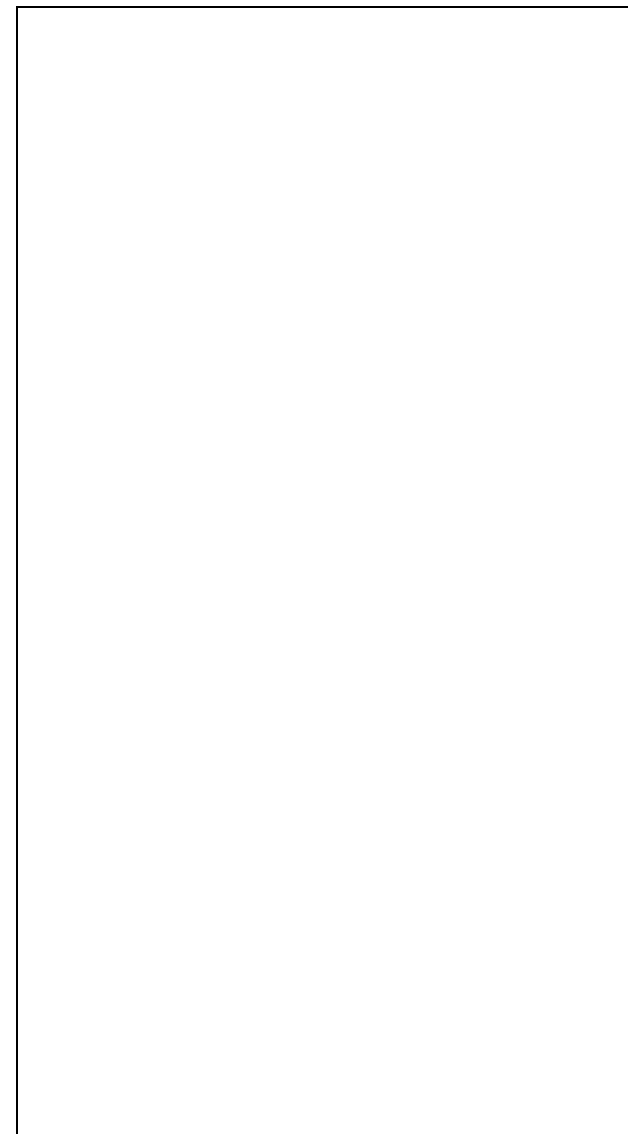
chrLinJ.21	CNVR_1	750173	751101	929	-0.7000747	2.148726e-20	-	LinJ21.T2220	hypothetical protein, conserved
chrLinJ.23	CNVR_1	83022	83996	975	0.7509445	2.02E-046	+	LinJ23.T0240	ATP-binding cassette protein subfamily C, member 2, putative (ABCC2)
chrLinJ.23	CNVR_2	88390	89120	731	0.6388144	1.32E-026	+	LinJ23.T0265	unknown reference
								LinJ23.T0267	unknown reference
chrLinJ.23	CNVR_3	103030	103638	609	0.6852254	2.47E-025	+	LinJ23.T0300	argininosuccinate synthase
chrLinJ.24	CNVR_1	859918	861027	1110	-0.6589012	1.017213e-22	-	LinJ24.T2425	unknown reference
								LinJ24.T2430	SpoU rRNA Methylase family
chrLinJ.26	CNVR_1	1041200	1041782	583	-0.793908	4.13E-025	-	LinJ26.T2740	glutamate 5-kinase
chrLinJ.26	CNVR_2	1047332	1047914	583	-1.324423	1.84E-054	-	LinJ26.T2746	unknown reference
chrLinJ.27	CNVR_1	14519	15495	977	-0.7305942	9.697135e-22	-	LinJ27.T0050	DEAD-box helicase-like protein
chrLinJ.29	CNVR_1	344813	367156	22344	1.018633	0	+	consecutive CNVs in wide range of the chromosome	
chrLinJ.29	CNVR_2	367309	372628	5320	0.791747	2.59E-204			
chrLinJ.29	CNVR_3	372933	375668	2736	0.7700763	3.72E-101			
chrLinJ.29	CNVR_4	375821	378100	2280	0.8195779	5.08E-094			

chrLinJ.29	CNVR_5	378253	380836	2584	0.7553593	1.54E-092	
chrLinJ.29	CNVR_6	380989	384636	3648	0.7525828	5.10E-129	
chrLinJ.29	CNVR_7	384789	385396	608	0.7571512	3.48E-023	
chrLinJ.29	CNVR_8	387069	388436	1368	0.6823351	6.04E-042	
chrLinJ.29	CNVR_9	646685	647748	1064	0.7165218	7.55E-036	
chrLinJ.29	CNVR_10	656109	656716	608	0.7348776	4.39E-022	
chrLinJ.29	CNVR_11	1172149	1173212	1064	0.842971	5.63E-047	
chrLinJ.29	CNVR_12	1184309	1185220	912	0.7841084	5.61E-036	
chrLinJ.29	CNVR_13	1192061	1193276	1216	0.7996017	5.83E-049	
chrLinJ.29	CNVR_14	3117	11476	8360	-1.11206	0	
chrLinJ.29	CNVR_15	12085	14516	2432	-1.040253	1.87E-170	
chrLinJ.29	CNVR_16	14669	21964	7296	-1.097092	0	
chrLinJ.29	CNVR_17	22117	23180	1064	-1.197551	5.30E-095	
chrLinJ.29	CNVR_18	23485	27740	4256	-1.028934	2.76E-291	
chrLinJ.29	CNVR_19	27893	31236	3344	-1.016517	1.15E-224	
chrLinJ.29	CNVR_20	31389	34124	2736	-0.9749041	1.50E-171	
chrLinJ.29	CNVR_21	35189	36556	1368	-0.7374436	2.92E-053	
chrLinJ.29	CNVR_22	37925	38836	912	-0.814715	5.54E-043	
chrLinJ.29	CNVR_23	38989	40204	1216	-0.8434505	2.86E-060	
chrLinJ.29	CNVR_24	40965	41724	760	-1.011898	3.80E-052	
chrLinJ.29	CNVR_25	41877	42484	608	-0.8166493	2.42E-029	-
chrLinJ.29	CNVR_26	43397	45068	1672	-0.8241564	6.89E-079	~1/3 of the chromosome
chrLinJ.29	CNVR_27	45373	47196	1824	-0.9982334	9.50E-120	
chrLinJ.29	CNVR_28	47501	48412	912	-0.8190955	2.19E-043	
chrLinJ.29	CNVR_29	48565	53428	4864	-0.8912159	2.03E-259	
chrLinJ.29	CNVR_30	53581	56772	3192	-0.9069058	2.83E-176	
chrLinJ.29	CNVR_31	56925	59356	2432	-0.8887499	4.16E-130	
chrLinJ.29	CNVR_32	59509	62244	2736	-0.8841039	8.80E-145	
chrLinJ.29	CNVR_33	62701	64220	1520	-0.7330602	2.38E-058	
chrLinJ.29	CNVR_34	64981	67412	2432	-0.8194473	1.02E-112	
chrLinJ.29	CNVR_35	69085	69996	912	-0.8992195	5.67E-051	
chrLinJ.29	CNVR_36	73341	76988	3648	-0.9299647	3.57E-210	

chrLinJ.29	CNVR_37	78053	78660	608	-0.9258823	2.65E-036
chrLinJ.29	CNVR_38	79877	80636	760	-0.7812687	1.42E-033
chrLinJ.29	CNVR_39	80941	82156	1216	-0.7810927	1.18E-052
chrLinJ.29	CNVR_40	82613	86716	4104	-0.8766905	5.92E-213
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chrLinJ.29	CNVR_42	91277	92036	760	-0.943441	2.16E-046
chrLinJ.29	CNVR_43	92493	93100	608	-0.7998621	2.57E-028
chrLinJ.29	CNVR_44	93861	94924	1064	-0.9173317	3.16E-061
chrLinJ.29	CNVR_45	95685	102220	6536	-0.9025467	0
chrLinJ.29	CNVR_46	102525	103588	1064	-0.9687772	3.53E-067
chrLinJ.29	CNVR_47	104805	106780	1976	-0.8869349	1.05E-105
chrLinJ.29	CNVR_48	106933	108452	1520	-0.9885739	1.74E-098
chrLinJ.29	CNVR_49	109821	111036	1216	-0.7484896	8.12E-049
chrLinJ.29	CNVR_50	111189	112100	912	-0.9127529	2.73E-052
chrLinJ.29	CNVR_51	112709	115140	2432	-0.9181771	1.02E-137
chrLinJ.29	CNVR_52	115293	117724	2432	-0.7626571	4.31E-099
chrLinJ.29	CNVR_53	118181	119092	912	-1.063809	1.44E-067
chrLinJ.29	CNVR_54	119245	120308	1064	-0.7837214	1.43E-046
chrLinJ.29	CNVR_55	120461	121676	1216	-0.7643025	1.15E-050
chrLinJ.29	CNVR_56	122133	122740	608	-0.7976302	3.52E-028
chrLinJ.29	CNVR_57	122893	123956	1064	-0.8960774	8.20E-059
chrLinJ.29	CNVR_58	124109	124868	760	-0.77017	9.49E-033
chrLinJ.29	CNVR_59	125173	126692	1520	-0.8693711	5.93E-079
chrLinJ.29	CNVR_60	126845	128668	1824	-0.9040285	5.04E-101
chrLinJ.29	CNVR_61	128973	131708	2736	-0.8054946	9.88E-123
chrLinJ.29	CNVR_62	132013	132620	608	-0.8794766	2.73E-033
chrLinJ.29	CNVR_63	132773	135204	2432	-0.7986614	1.17E-107
chrLinJ.29	CNVR_64	135357	140828	5472	-0.8918986	5.68E-292
chrLinJ.29	CNVR_65	141589	143564	1976	-0.896255	1.19E-107
chrLinJ.29	CNVR_66	144325	146756	2432	-0.8656491	3.18E-124
chrLinJ.29	CNVR_67	146909	147516	608	-0.7561578	1.05E-025
chrLinJ.29	CNVR_68	147821	152988	5168	-0.8708124	1.93E-264



chrLinJ.29	CNVR_69	153141	154964	1824	-0.7771357	2.34E-077
chrLinJ.29	CNVR_70	157397	160436	3040	-0.9051116	2.13E-167
chrLinJ.29	CNVR_71	160741	165300	4560	-0.9443	2.95E-269
chrLinJ.29	CNVR_72	166061	168340	2280	-0.9306081	2.78E-132
chrLinJ.29	CNVR_73	168493	171228	2736	-0.7641819	1.23E-111
chrLinJ.29	CNVR_74	171381	178828	7448	-0.8724544	0
chrLinJ.29	CNVR_75	179133	179740	608	-0.8297586	3.75E-030
chrLinJ.29	CNVR_76	180197	188100	7904	-1.02365	0
chrLinJ.29	CNVR_77	188405	192204	3800	-0.9208793	3.94E-215
chrLinJ.29	CNVR_78	192509	193572	1064	-1.0018	4.50E-071
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chrLinJ.29	CNVR_80	205125	208772	3648	-0.9128927	1.72E-203
chrLinJ.29	CNVR_81	209685	211052	1368	-0.8857686	1.34E-073
chrLinJ.29	CNVR_82	211205	213332	2128	-0.9039429	1.62E-117
chrLinJ.29	CNVR_83	213485	220476	6992	-0.9857399	0
chrLinJ.29	CNVR_84	220933	221540	608	-0.6905912	5.73E-022
chrLinJ.29	CNVR_85	221693	225796	4104	-0.986085	2.43E-261
chrLinJ.29	CNVR_86	225949	230356	4408	-1.005746	3.64E-290
chrLinJ.29	CNVR_87	230509	235220	4712	-0.8923389	6.14E-252
chrLinJ.29	CNVR_88	235373	247836	12464	-1.007824	0
chrLinJ.29	CNVR_89	247989	249204	1216	-0.9423849	5.32E-073
chrLinJ.29	CNVR_90	249357	250116	760	-0.8861934	1.01E-041
chrLinJ.29	CNVR_91	250269	254828	4560	-0.9432985	9.24E-269
chrLinJ.29	CNVR_92	254981	269572	14592	-0.9625751	0
chrLinJ.29	CNVR_93	269725	285380	15656	-1.005377	0
chrLinJ.29	CNVR_94	285685	294044	8360	-0.9766335	0
chrLinJ.29	CNVR_95	294349	300884	6536	-1.039701	0
chrLinJ.29	CNVR_96	301037	309852	8816	-1.057552	0
chrLinJ.29	CNVR_97	310005	311220	1216	-0.9951714	4.63E-080
chrLinJ.29	CNVR_98	311373	318212	6840	-1.111651	0
chrLinJ.29	CNVR_99	321253	321860	608	-0.8292525	4.03E-030
chrLinJ.29	CNVR_100	322469	323836	1368	-0.7347381	6.53E-053



chrLinJ.29	CNVR_101	325661	326268	608	-0.7727201	1.10E-026			
chrLinJ.29	CNVR_102	329765	330372	608	-0.6461491	5.16E-024			
chrLinJ.29	CNVR_103	330525	331284	760	-0.6201795	2.20E-022			
chrLinJ.29	CNVR_104	332805	334172	1368	-0.7781581	1.29E-058			
chrLinJ.29	CNVR_105	338125	338732	608	-0.7454138	4.46E-025			
chrLinJ.29	CNVR_106	340101	342532	2432	-0.7392163	1.19E-093			
chrLinJ.30	CNVR_1	75961	76535	575	0.7082327	7.97E-021	+	LinJ30.T0250	ubiquitin hydrolase
chrLinJ.30	CNVR_2	1363177	1364039	863	0.6519114	1.70E-026	+	LinJ30.T3808	unknown reference
chrLinJ.30	CNVR_3	538345	538919	575	-0.7607453	3.64E-027	-	LinJ30.T1580	protein kinase
chrLinJ.30	CNVR_4	578809	579383	575	-0.8023134	8.24E-030	-	LinJ30.T1675	unknown reference
chrLinJ.30	CNVR_5	1285705	1286279	575	-0.8259974	2.34E-031	-	LinJ30.T3550	hypothetical protein, conserved
chrLinJ.30	CNVR_6	1301833	1302407	575	-0.7665792	1.57E-027	-	LinJ30.T3610	cytochrome p450-like protein
chrLinJ.30	CNVR_7	1354249	1354967	719	-1.000621	5.98E-054	-	LinJ30.T3800	ribosomal P protein AGP2beta-1, putative
chrLinJ.34	CNVR_1	8990	9796	807	-0.8518063	4.41E-028	-	LinJ34.T0020	hypothetical protein, unknown function
chrLinJ.34	CNVR_2	15656	16462	807	-0.7993519	2.30E-025	-	LinJ34.T0050	Cleft lip and palate transmembrane protein 1 (CLPTM1)

chrLinJ.34	CNVR_3	1659330	1660136	807	-0.7031188	1.34E-020	-	LinJ34.T4230	1,2-Dihydroxy-3-keto-5-methylthiopentene dioxygenase
chrLinJ.34	CNVR_4	1660946	1662560	1615	-0.8227557	1.99E-051	-	LinJ34.T4240	hypothetical protein, conserved
chrLinJ.34	CNVR_5	1665188	1666196	1009	-0.941853	1.08E-040	-	LinJ34.T4250	cyclic nucleotide-binding domain containing protein
chrLinJ.35	CNVR_1	1398293	1399823	1531	0.701594	5.646372e-36	+	LinJ35.T3526	unknown reference
								LinJ35.T3530	hypothetical protein
chrLinJ.36	CNVR_1	1009002	1010667	1666	0.6683059	7.01E-038	+	LinJ36.T2640	nucleoporin interacting component (NUP93)
								LinJ36.T2650	hypothetical protein, conserved
chrLinJ.36	CNVR_2	1019236	1021139	1904	0.7100753	3.98E-048	+	LinJ36.T2680	hypothetical protein, conserved
								LinJ36.T2690	hypothetical protein, conserved



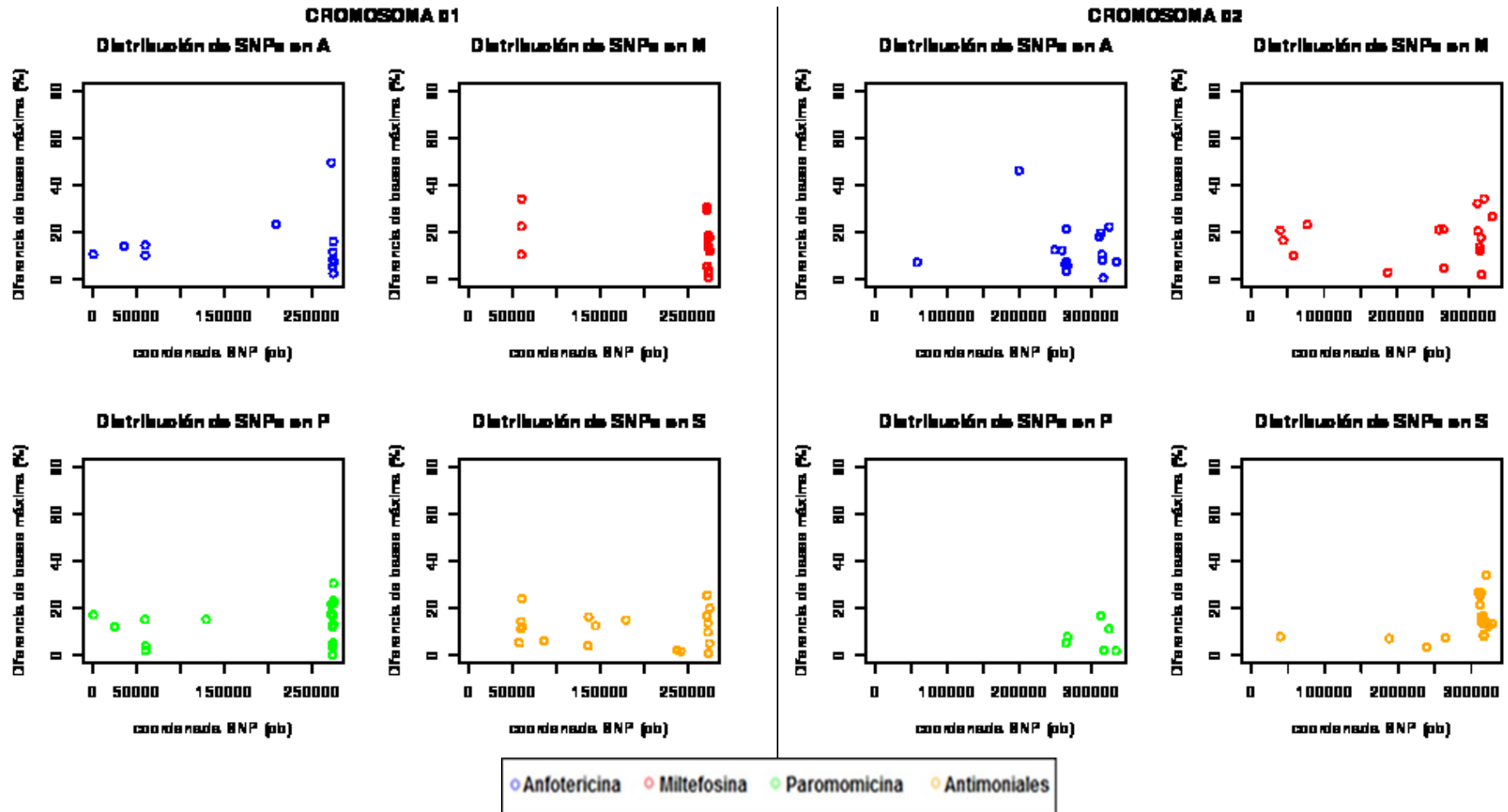
chrLinJ.36	CNVR_3	1021378	1029707	8330	0.7970678	1.85E-253	+	LinJ36.T2690	hypothetical protein, conserved
								LinJ.36.T2695	unknown reference
								LinJ36.T2700	membrane-bound acid phosphatase precursor (MBAP)
								LinJ36.T2705	unknown reference
chrLinJ.36	CNVR_4	1030184	1032325	2142	0.7714994	8.69E-063	+	LinJ36.T2710	related to multifunctional cyclin-dependent kinase pho85-like protein
chrLinJ.36	CNVR_5	1043274	1044463	1190	0.8322104	7.92E-041	+	LinJ36.T2740	folylpolyglutamate synthetase (FPGS)

### **Anexo 3**

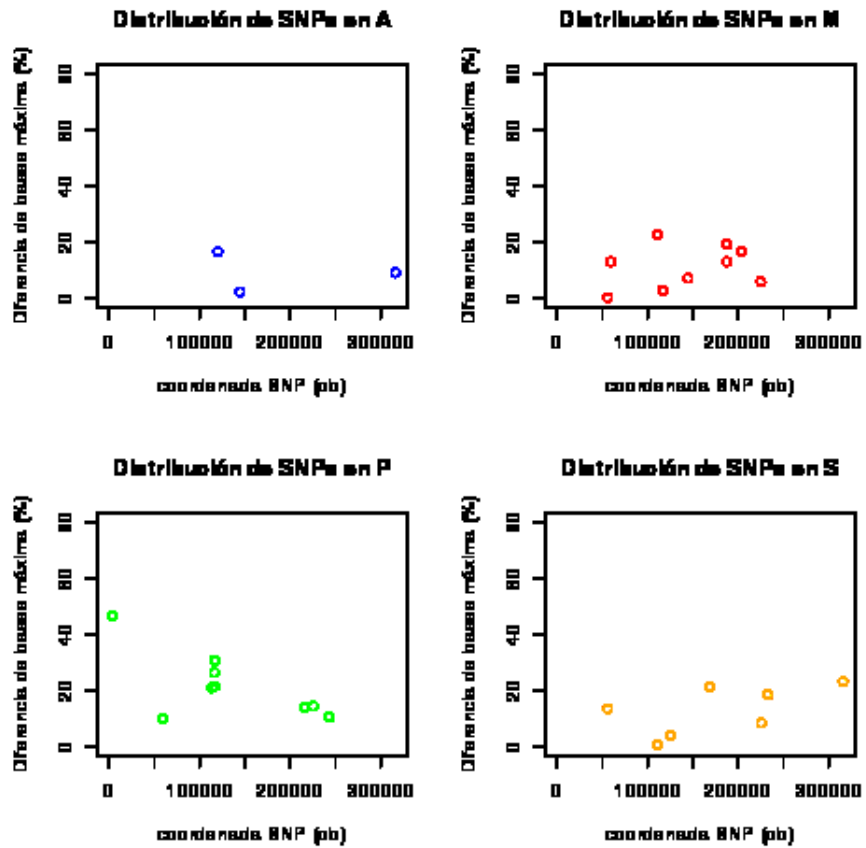
Tabla de frecuencias de bases en los SNPs del genoma

## Anexo 4

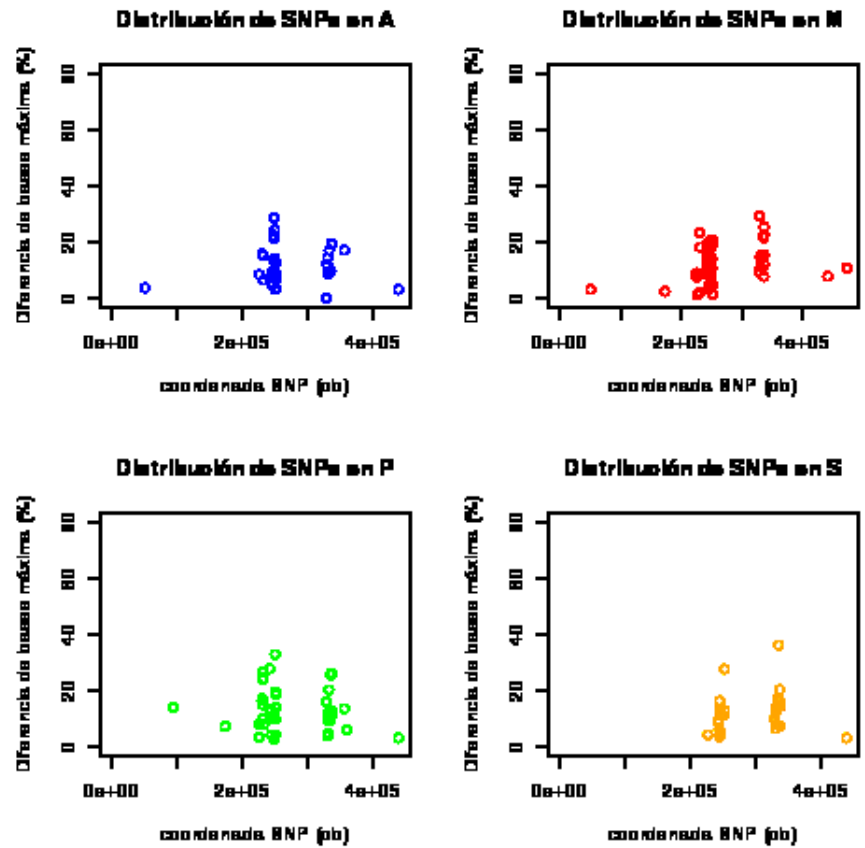
Gráficos de distribución de la mayor diferencia de bases por cromosoma:



### CROMOSOMA 03

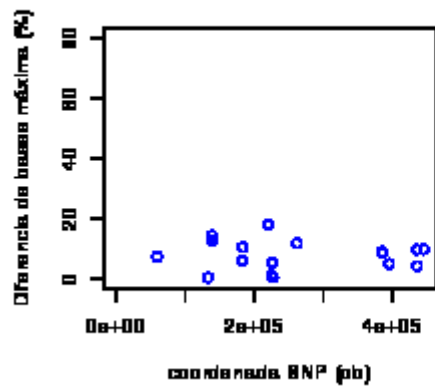


### CROMOSOMA 04

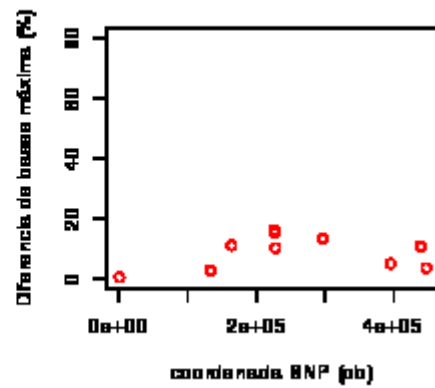


### CROMOSOMA 05

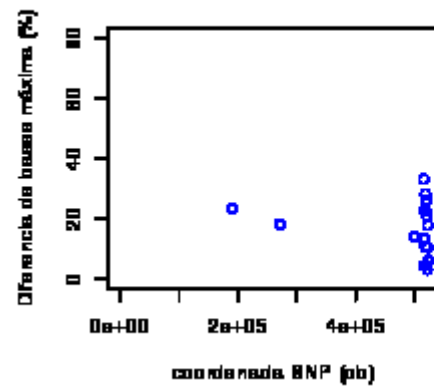
Distribución de SNPs en A



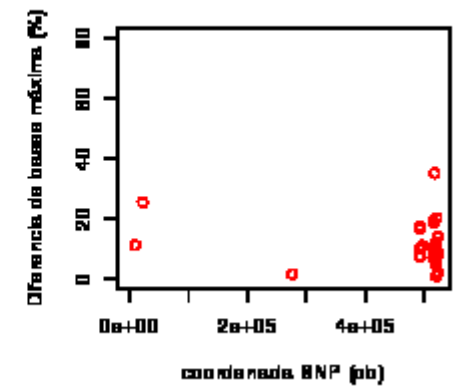
Distribución de SNPs en M



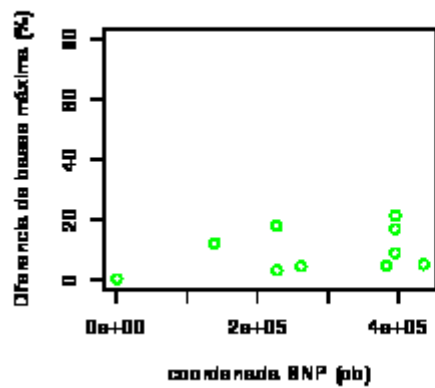
Distribución de SNPs en A



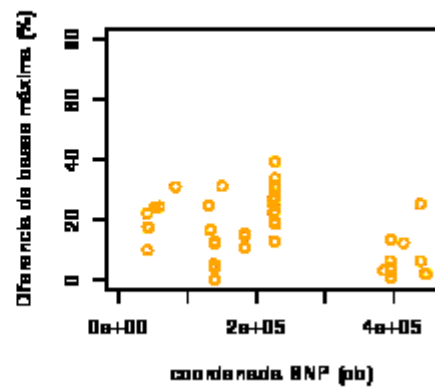
Distribución de SNPs en M



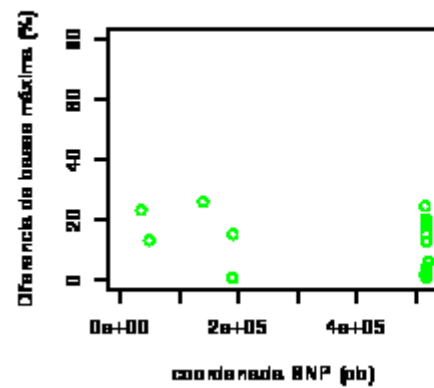
Distribución de SNPs en P



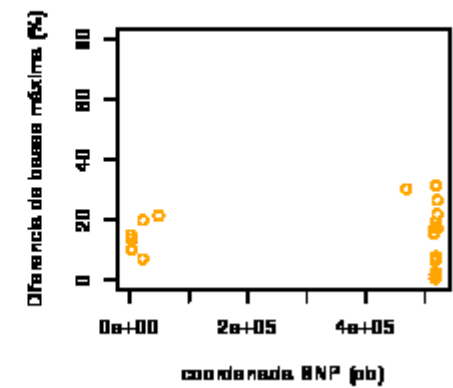
Distribución de SNPs en S



Distribución de SNPs en P



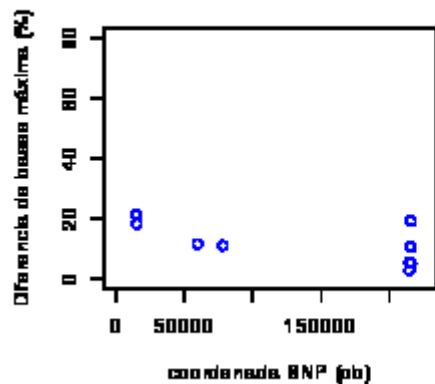
Distribución de SNPs en S



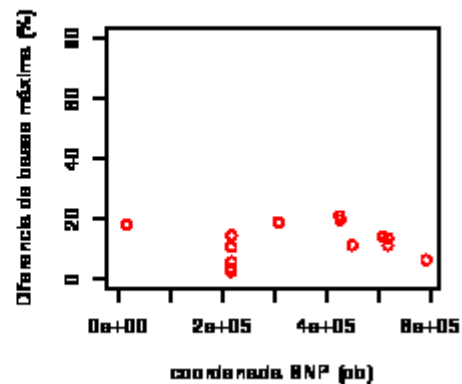
○ Anfotericina    ○ Miltefosina    ○ Paromomicina    ○ Antimoniales

### CROMOSOMA 07

Distribución de SNPs en A

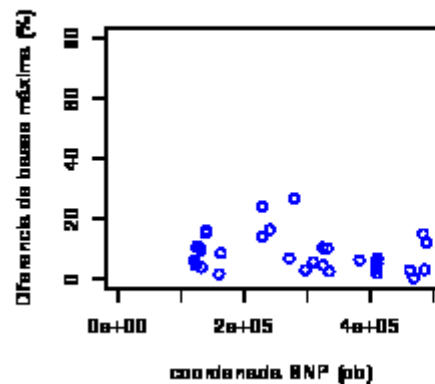


Distribución de SNPs en M

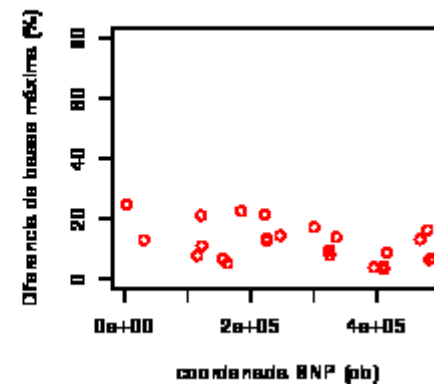


### CROMOSOMA 08

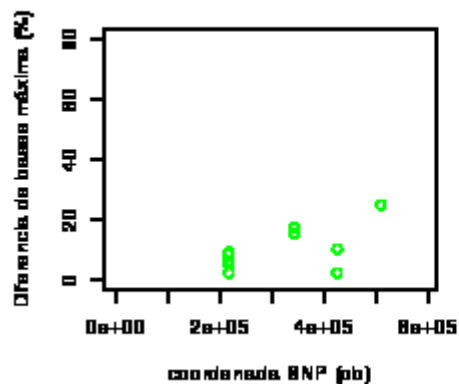
Distribución de SNPs en A



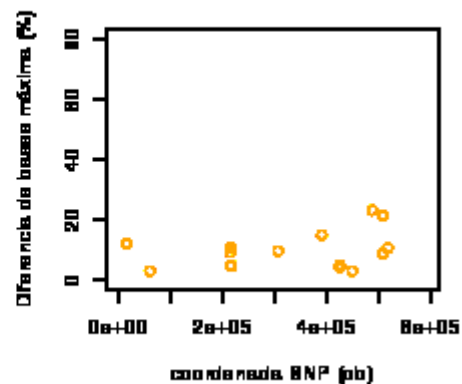
Distribución de SNPs en M



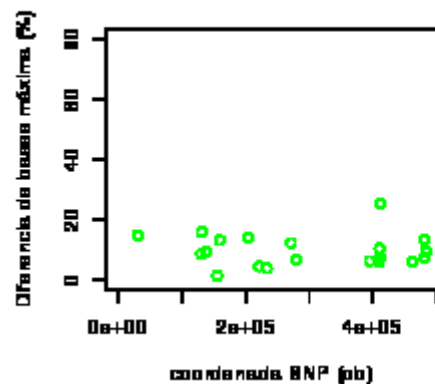
Distribución de SNPs en P



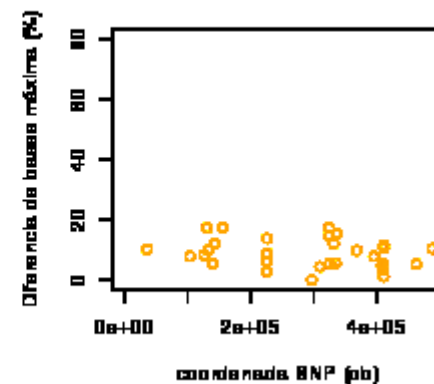
Distribución de SNPs en S

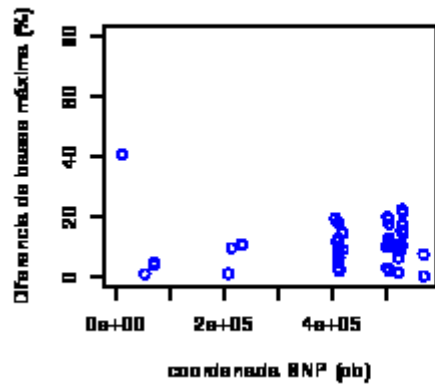
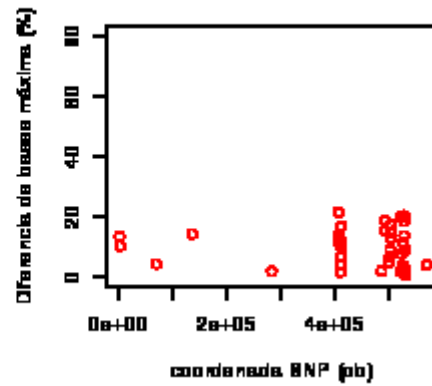
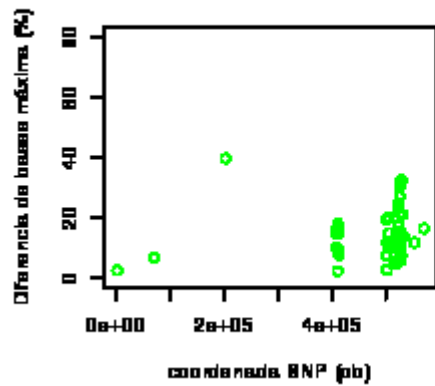
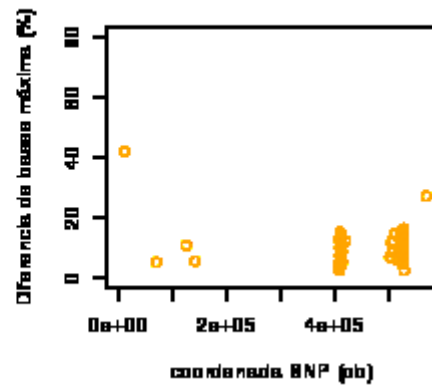
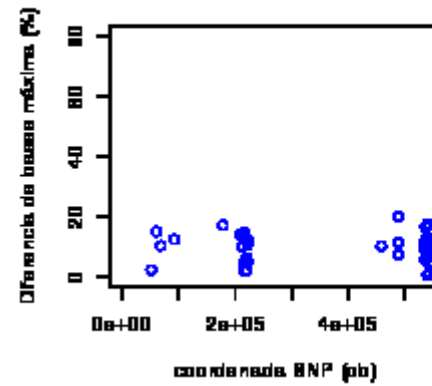
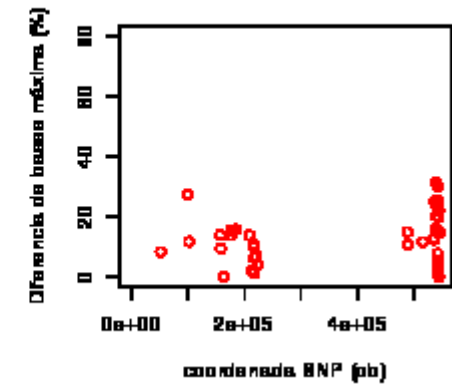
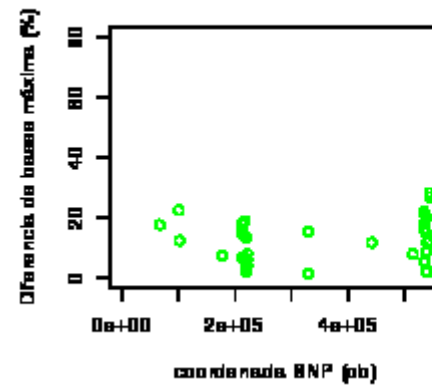
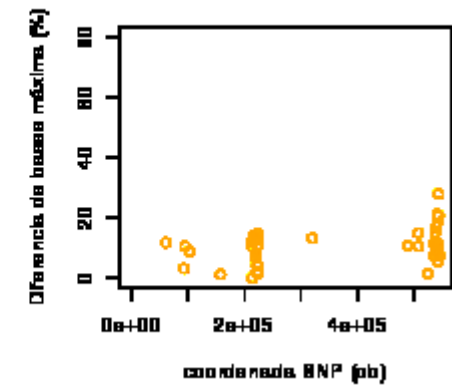


Distribución de SNPs en P



Distribución de SNPs en S

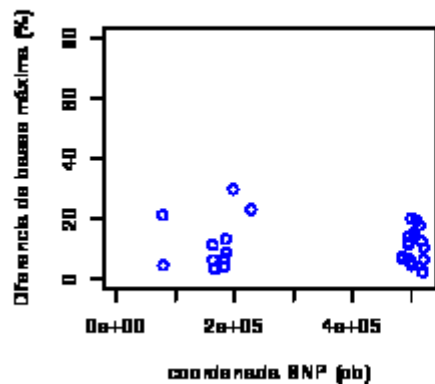


**CROMOSOMA 02****Distribución de SNPs en A****Distribución de SNPs en M****Distribución de SNPs en P****Distribución de SNPs en S****CROMOSOMA 10****Distribución de SNPs en A****Distribución de SNPs en M****Distribución de SNPs en P****Distribución de SNPs en S**

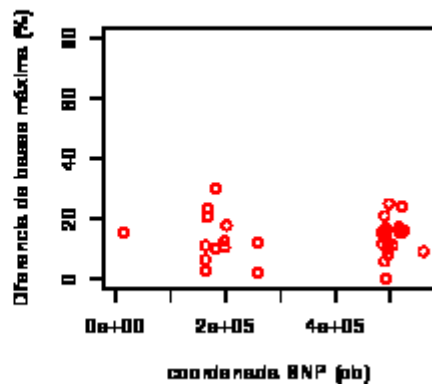
○ Anfotericina    ○ Miltefosina    ○ Paromomicina    ○ Antimoniales

### CROMOSOMA 11

#### Distribución de SNPs en A

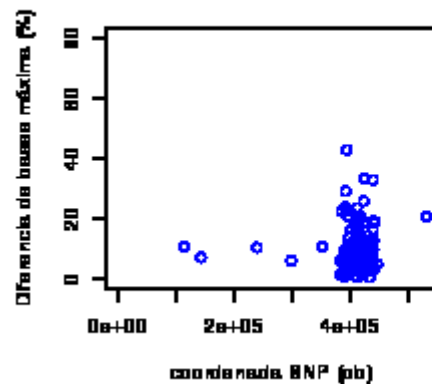


#### Distribución de SNPs en M

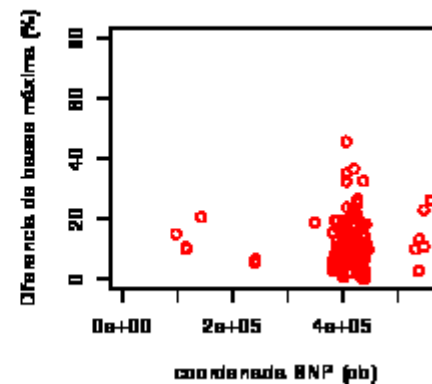


### CROMOSOMA 12

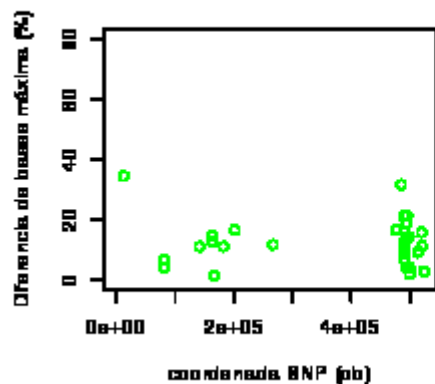
#### Distribución de SNPs en A



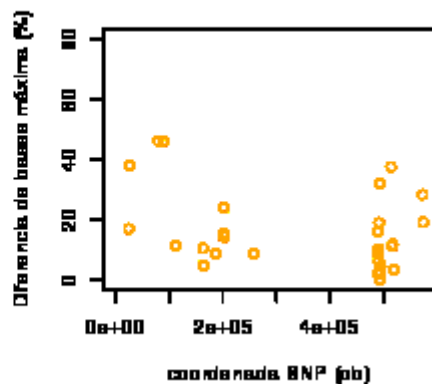
#### Distribución de SNPs en M



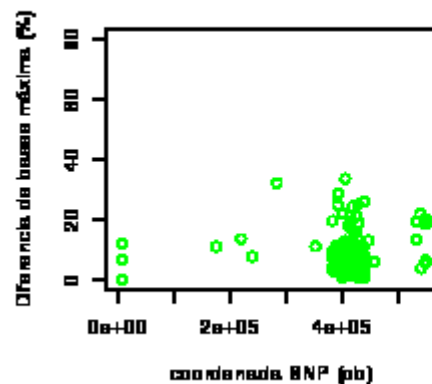
#### Distribución de SNPs en P



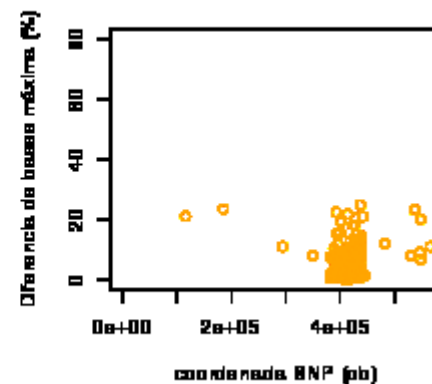
#### Distribución de SNPs en S



#### Distribución de SNPs en P



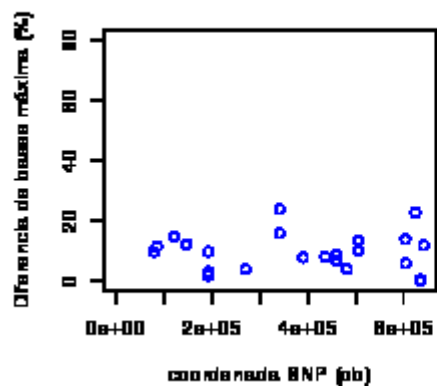
#### Distribución de SNPs en S



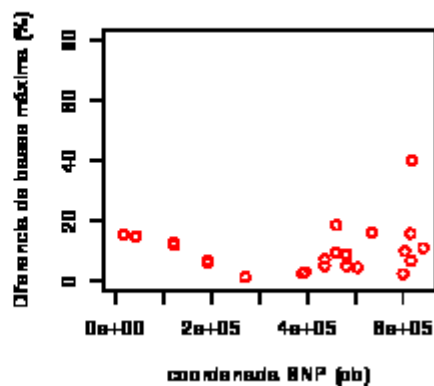


### CROMOSOMA 12

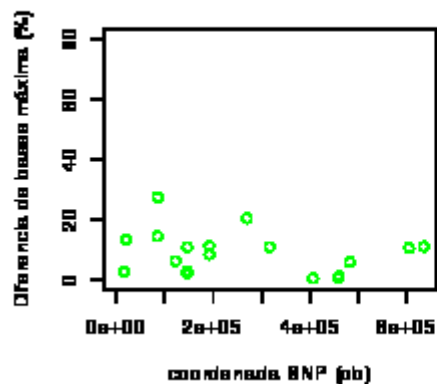
Distribución de SNPs en A



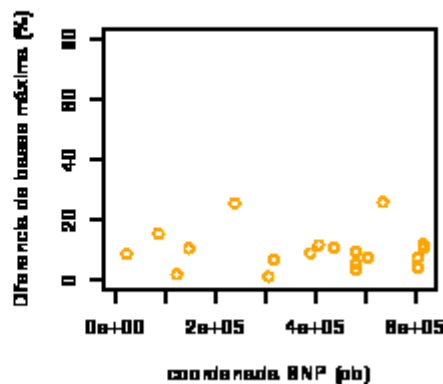
Distribución de SNPs en M



Distribución de SNPs en P

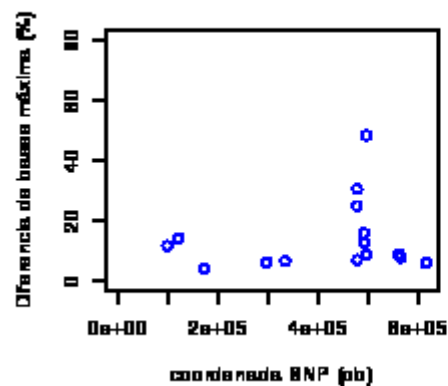


Distribución de SNPs en S

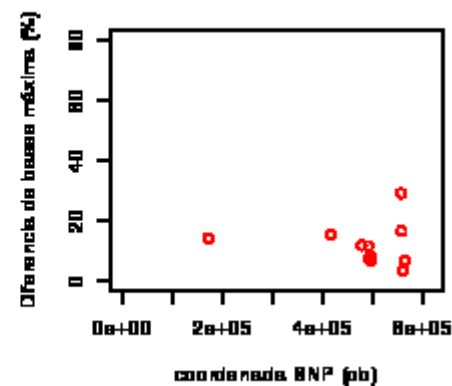


### CROMOSOMA 14

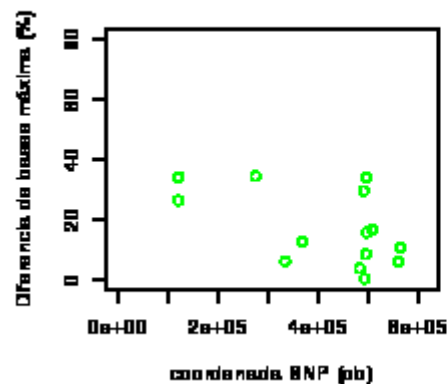
Distribución de SNPs en A



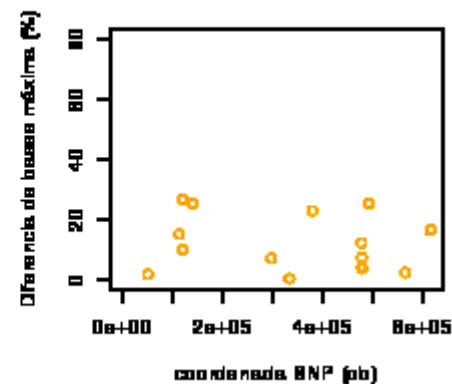
Distribución de SNPs en M



Distribución de SNPs en P



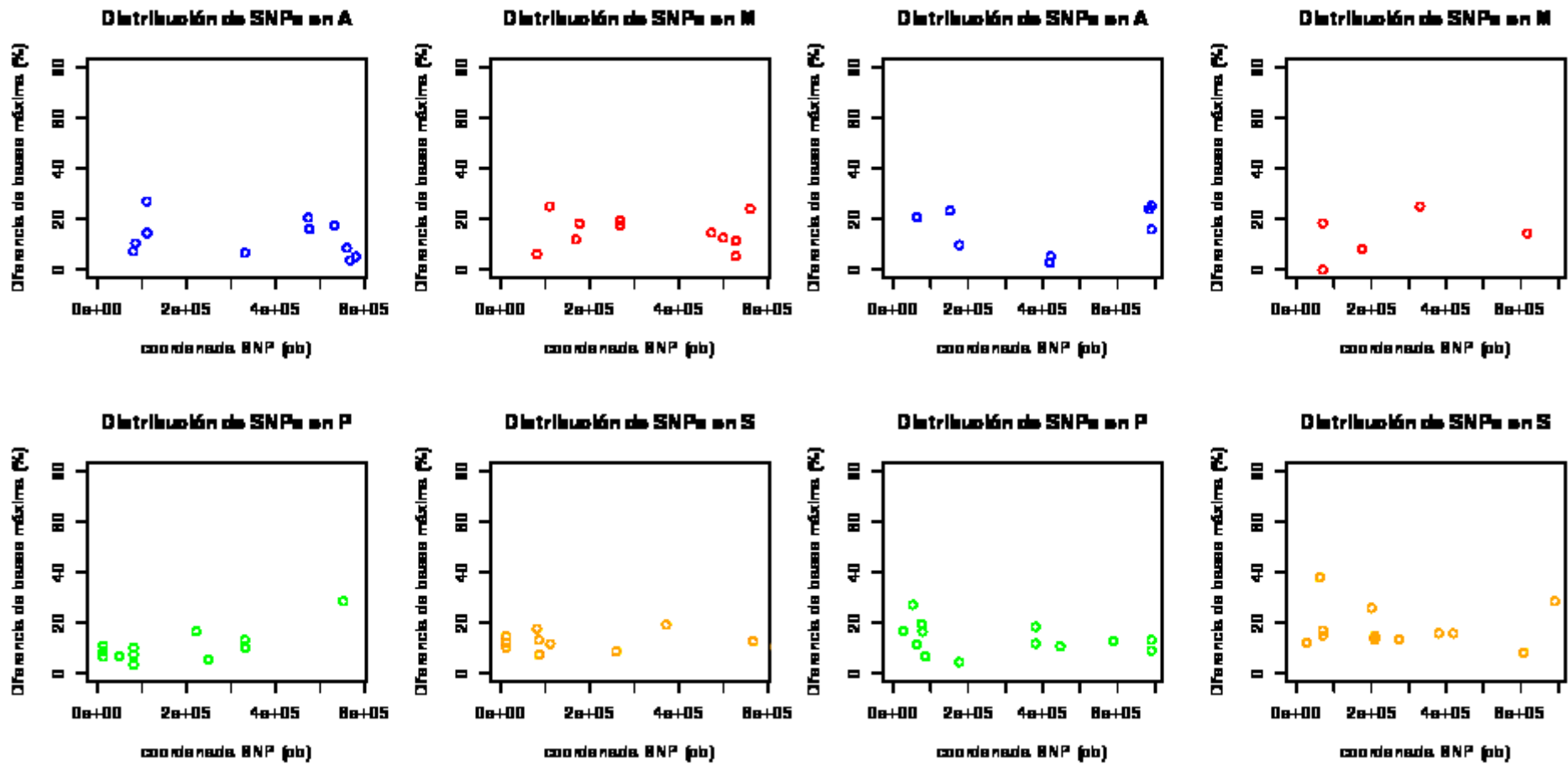
Distribución de SNPs en S



○ Anfotericina    ○ Miltefosina    ○ Paromomicina    ○ Antimoniales

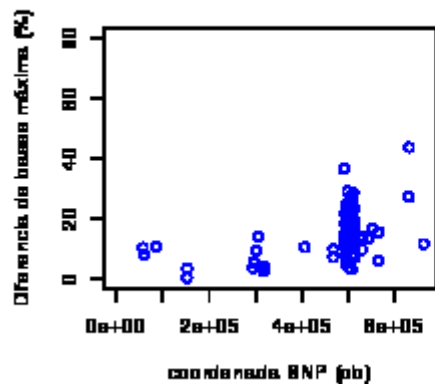
**CROMOSOMA 16**

**CROMOSOMA 16**

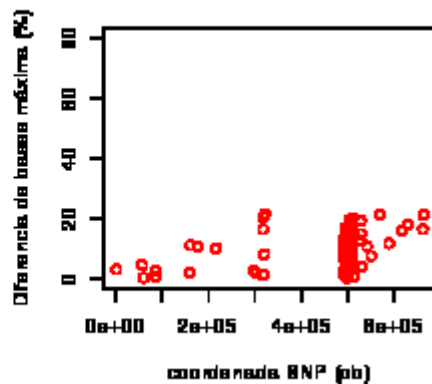


### CROMOSOMA 17

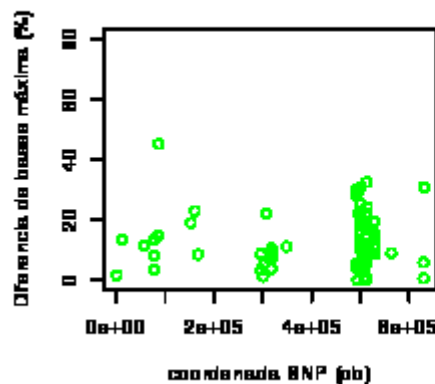
Distribución de SNPs en A



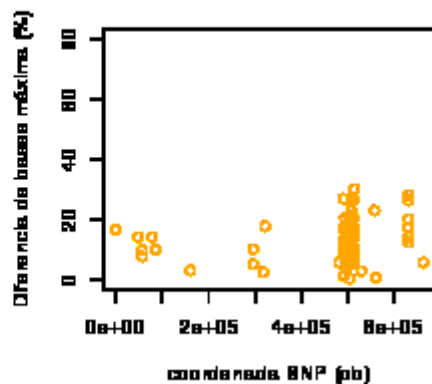
Distribución de SNPs en M



Distribución de SNPs en P

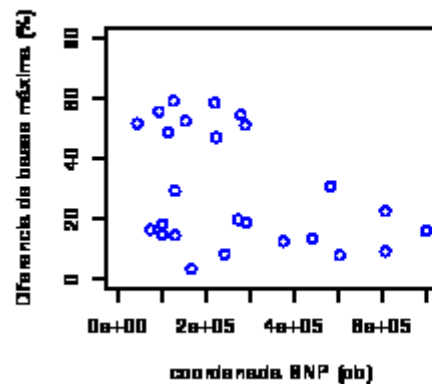


Distribución de SNPs en S

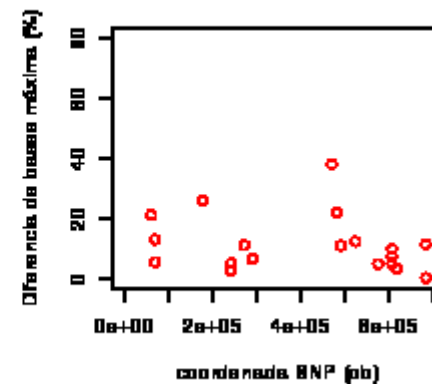


### CROMOSOMA 18

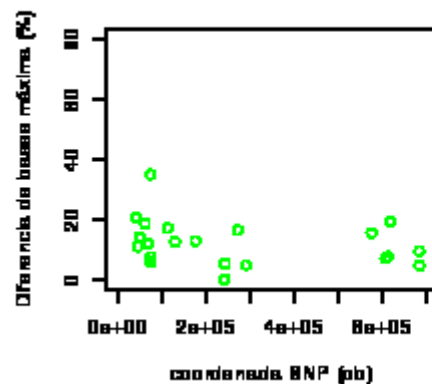
Distribución de SNPs en A



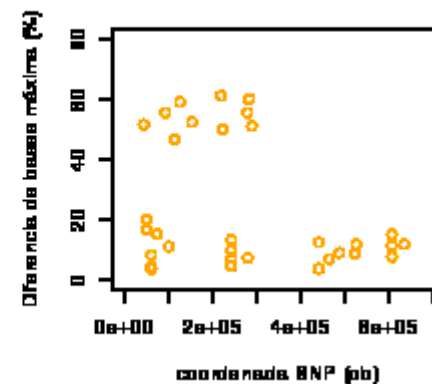
Distribución de SNPs en M



Distribución de SNPs en P

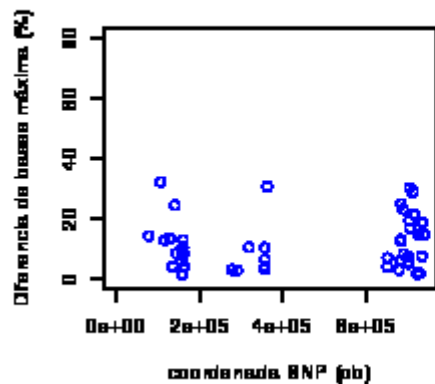


Distribución de SNPs en S

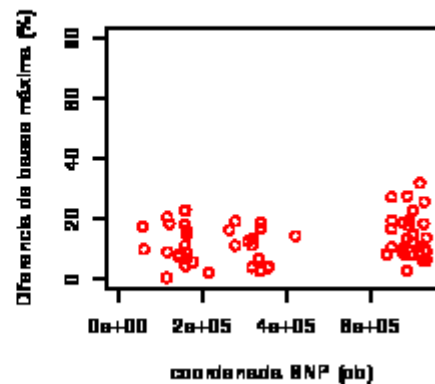


### CROMOSOMA 10

Distribución de SNPs en A

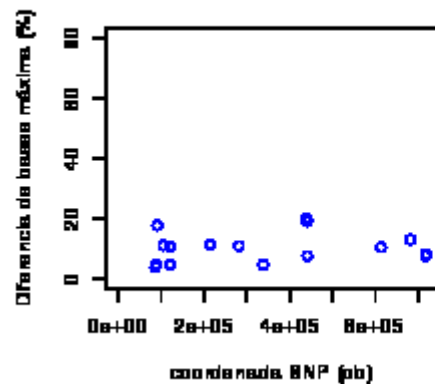


Distribución de SNPs en M

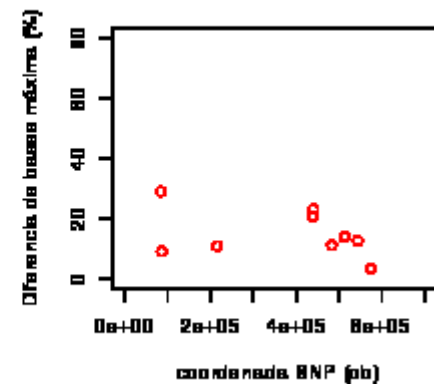


### CROMOSOMA 20

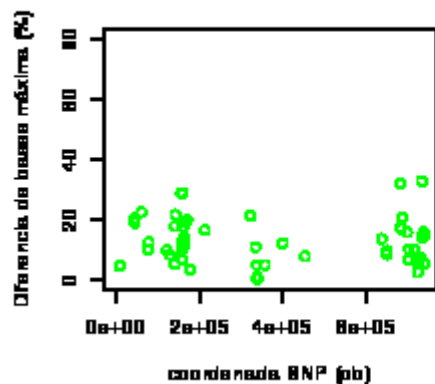
Distribución de SNPs en A



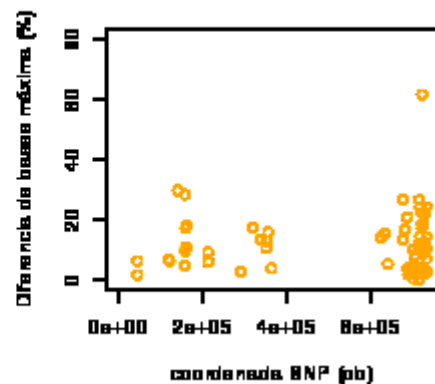
Distribución de SNPs en M



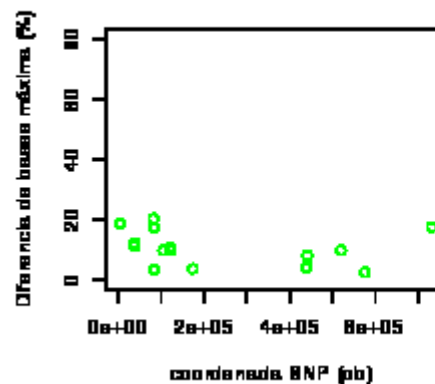
Distribución de SNPs en P



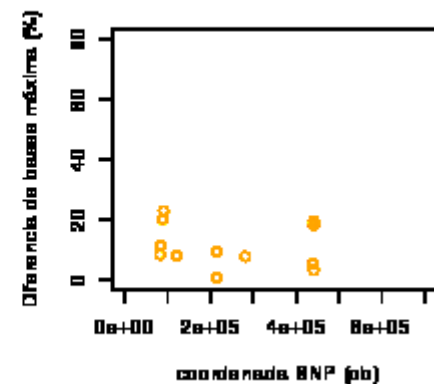
Distribución de SNPs en S



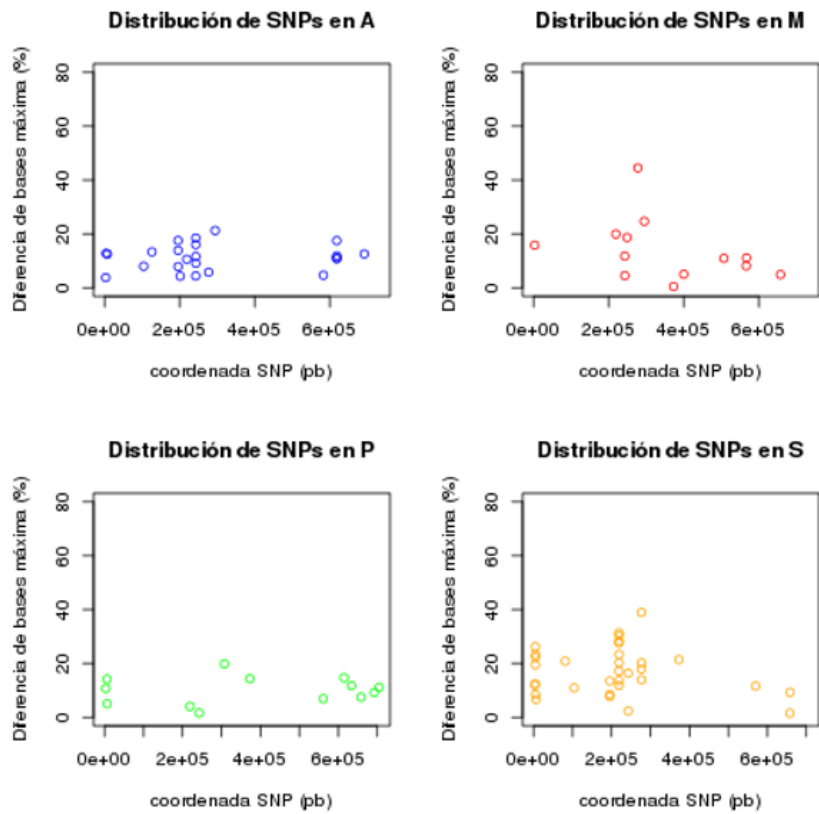
Distribución de SNPs en P



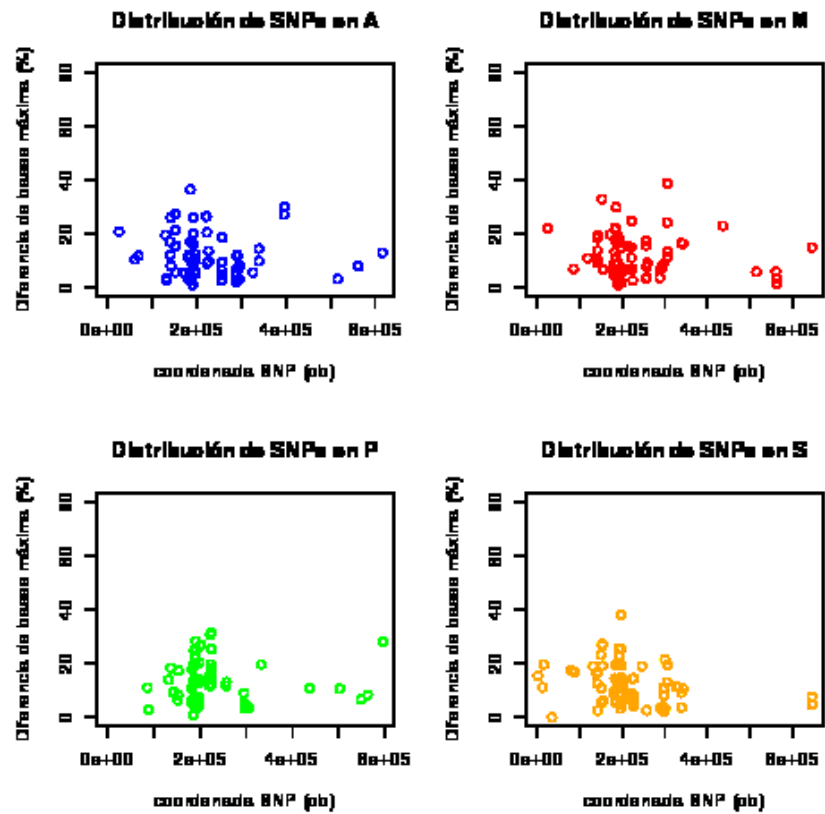
Distribución de SNPs en S



### CROMOSOMA 21

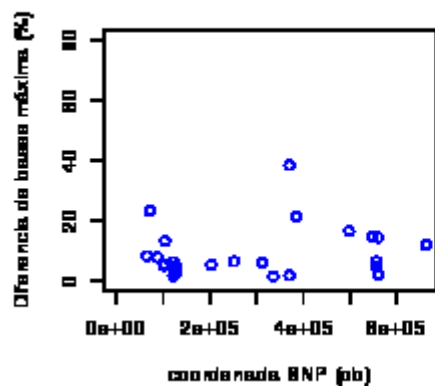


### CROMOSOMA 22

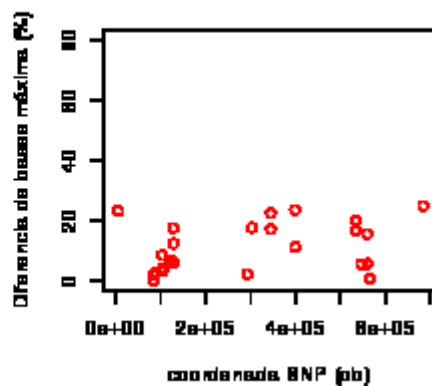


### CROMOSOMA 23

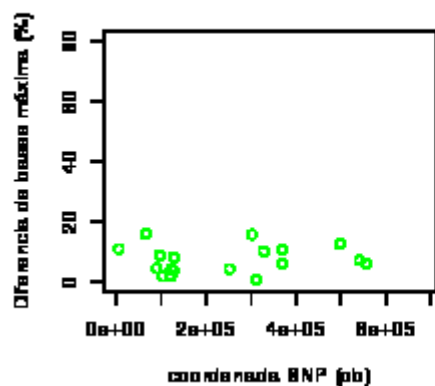
#### Distribución de SNPs en A



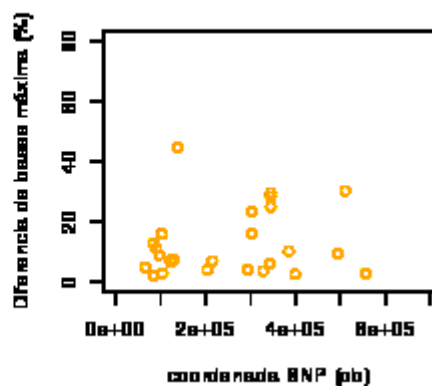
#### Distribución de SNPs en M



#### Distribución de SNPs en P

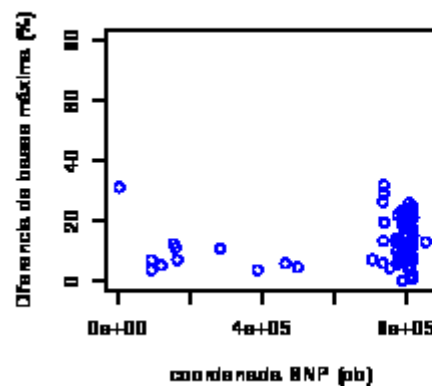


#### Distribución de SNPs en S

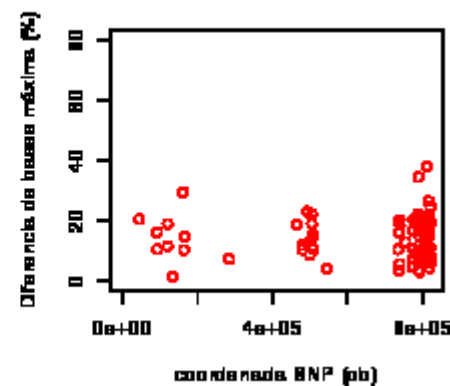


### CROMOSOMA 24

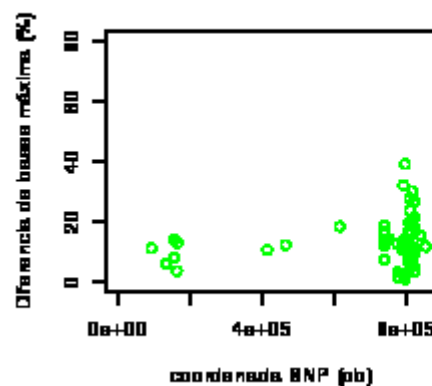
#### Distribución de SNPs en A



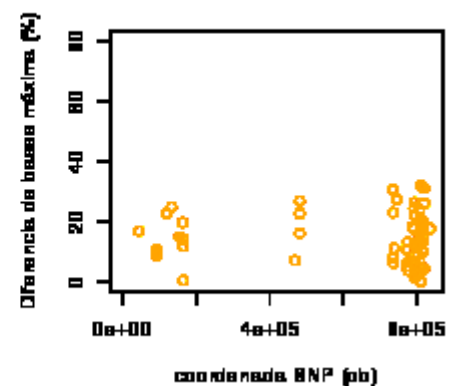
#### Distribución de SNPs en M



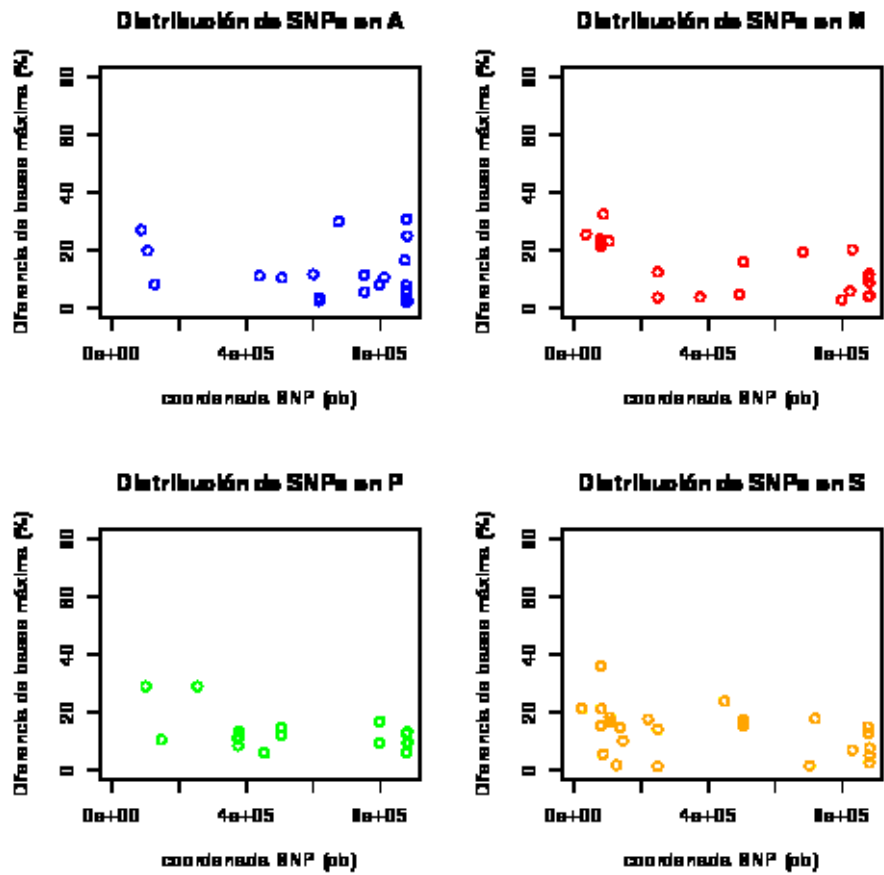
#### Distribución de SNPs en P



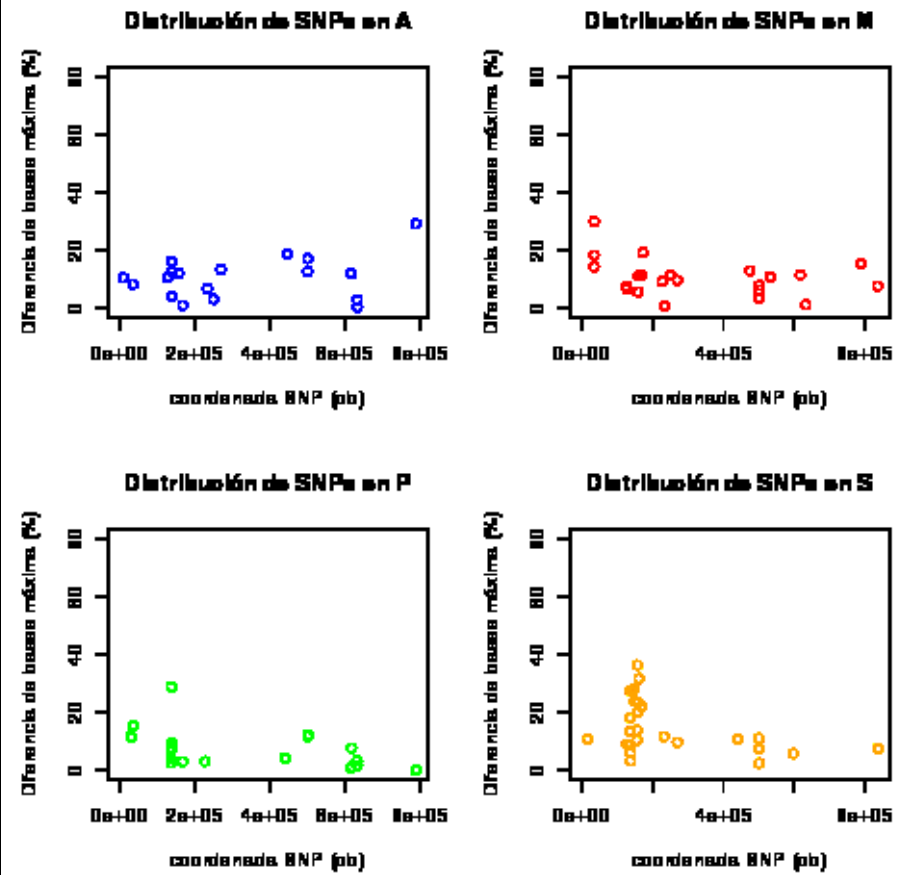
#### Distribución de SNPs en S



**CROMOSOMA 26**

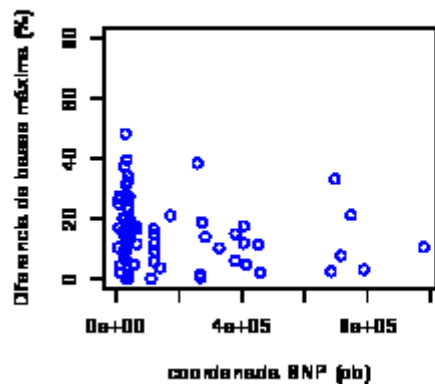


**CROMOSOMA 26**

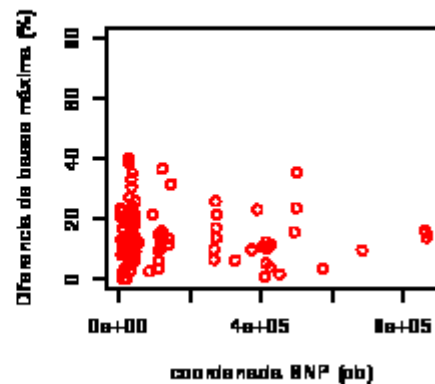


### CROMOSOMA 27

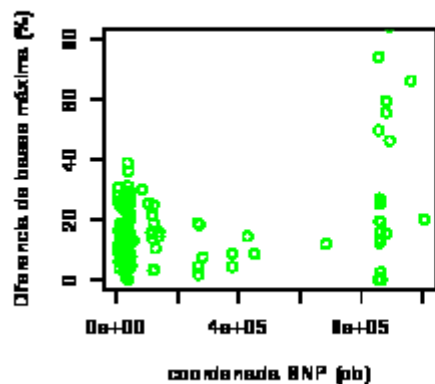
#### Distribución de SNPs en A



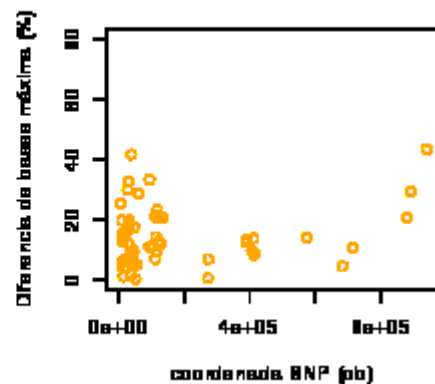
#### Distribución de SNPs en M



#### Distribución de SNPs en P

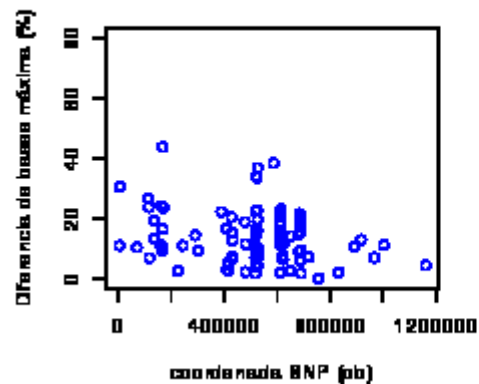


#### Distribución de SNPs en S

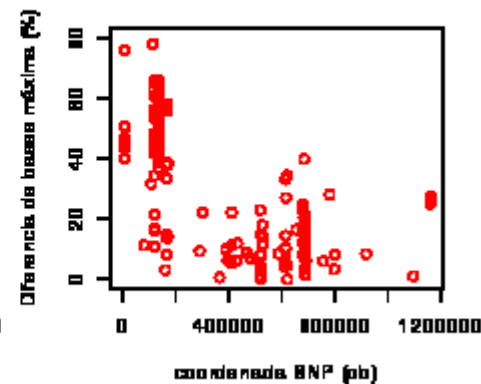


### CROMOSOMA 28

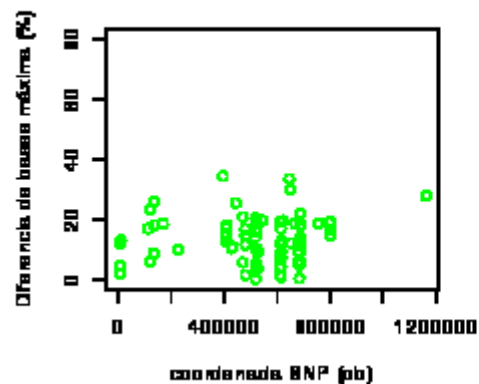
#### Distribución de SNPs en A



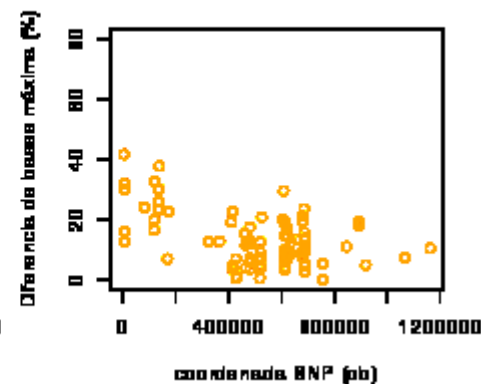
#### Distribución de SNPs en M



#### Distribución de SNPs en P

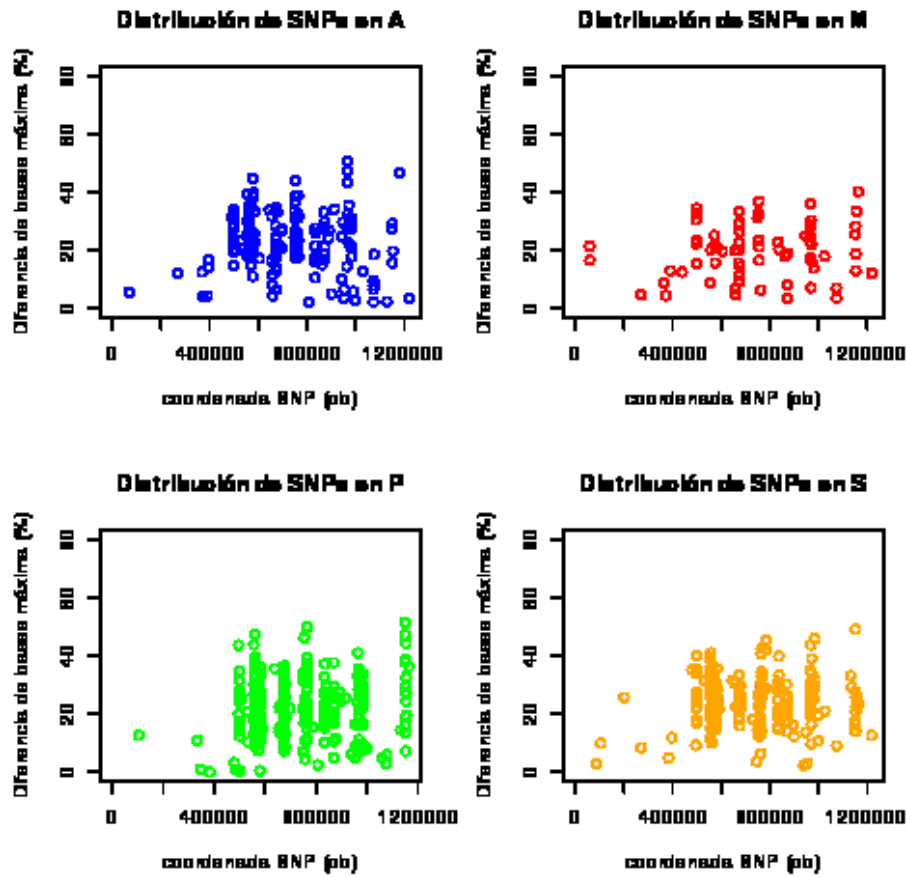


#### Distribución de SNPs en S

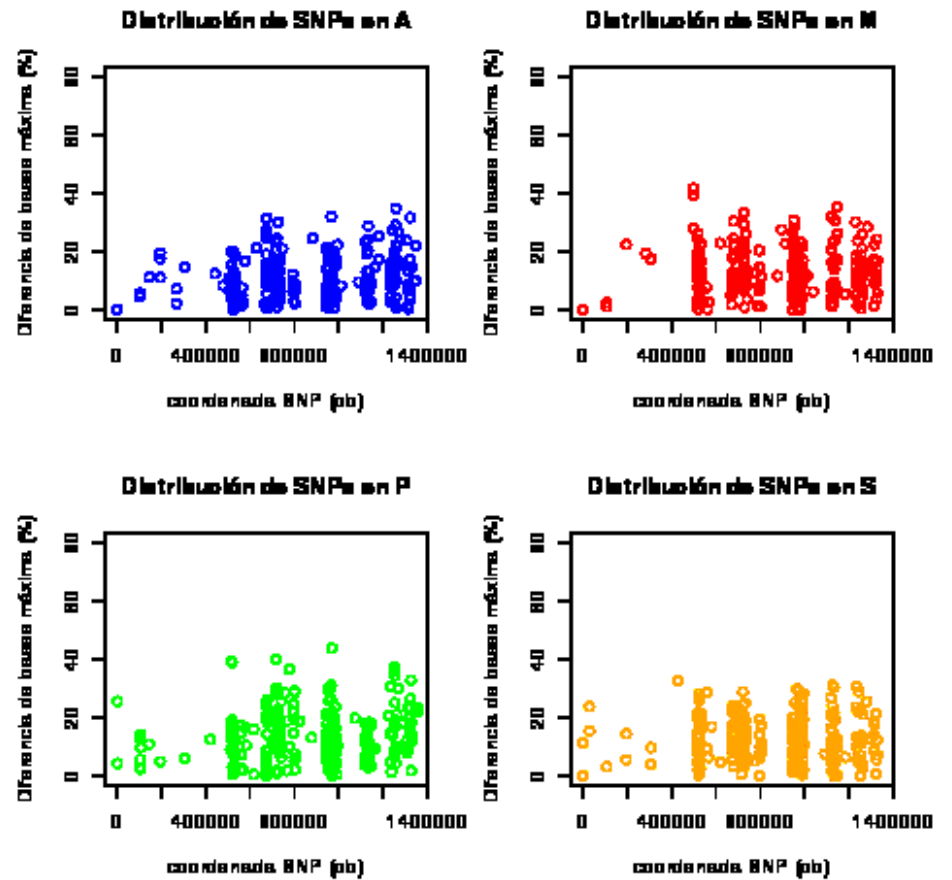




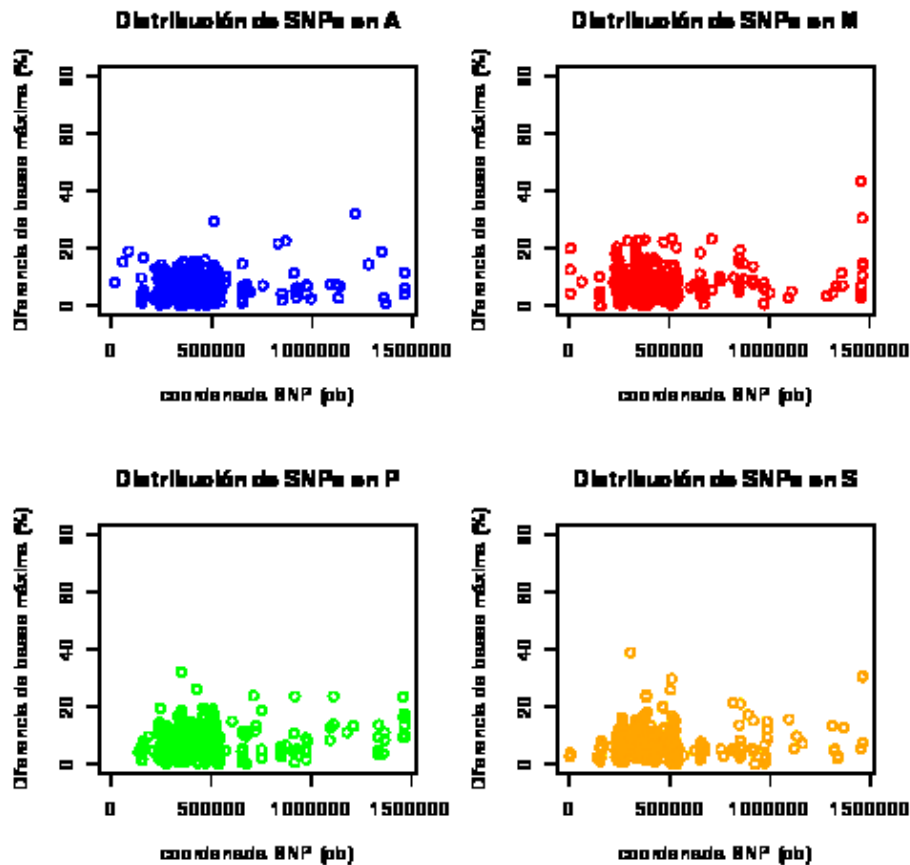
**CROMOSOMA 28**



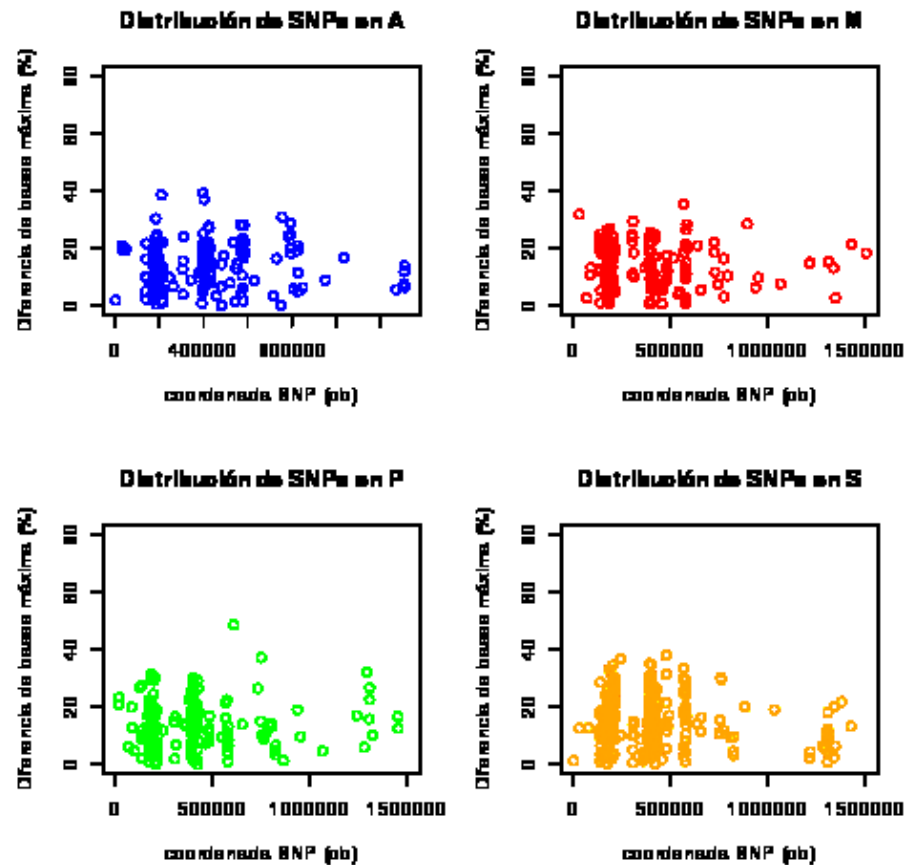
**CROMOSOMA 28**



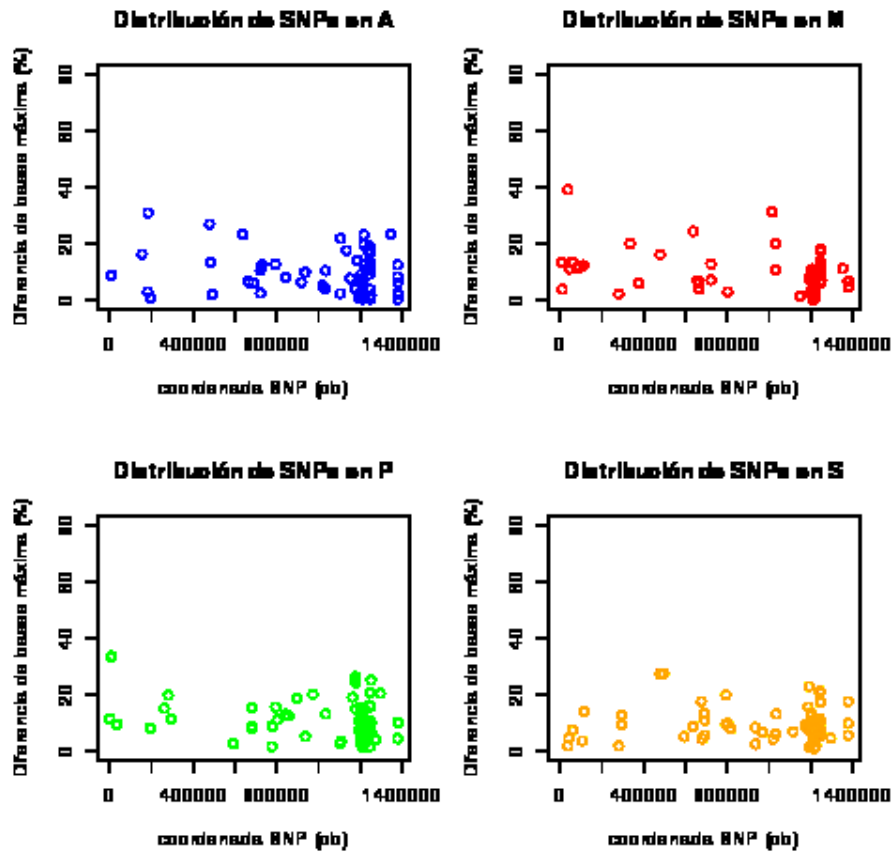
### CROMOSOMA 21



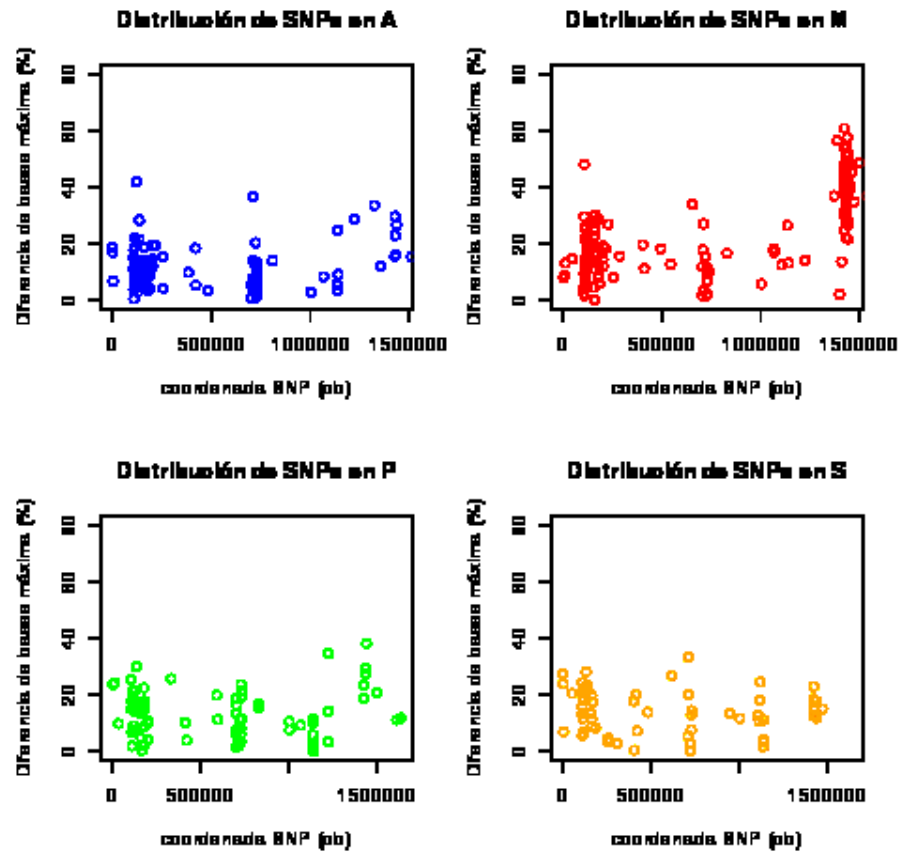
### CROMOSOMA 22



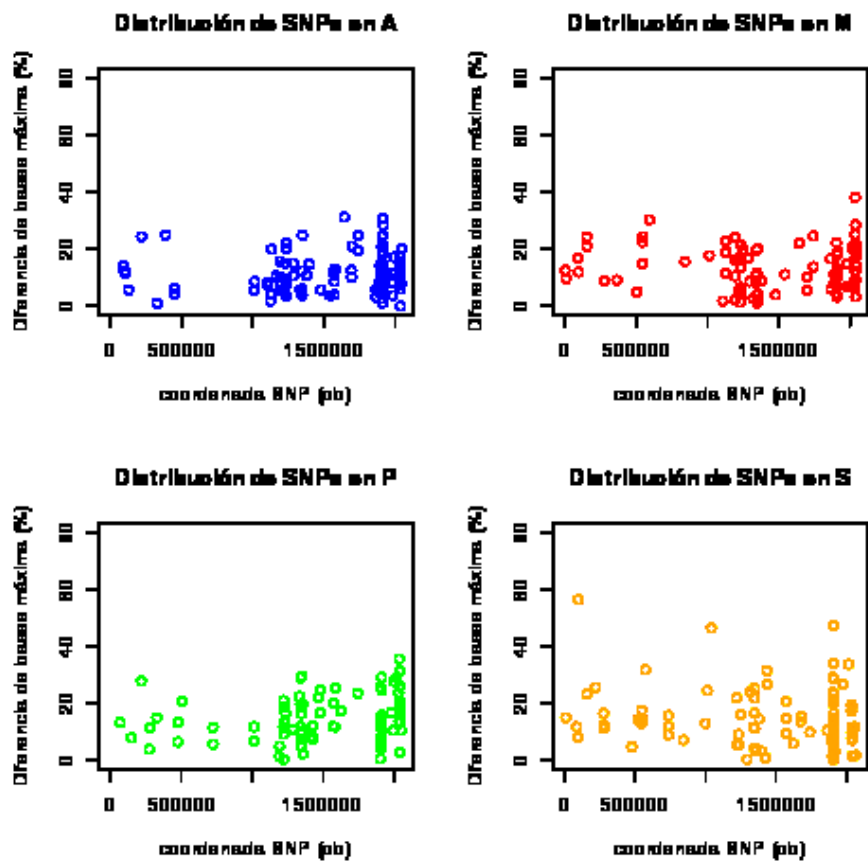
### CROMOSOMA 23



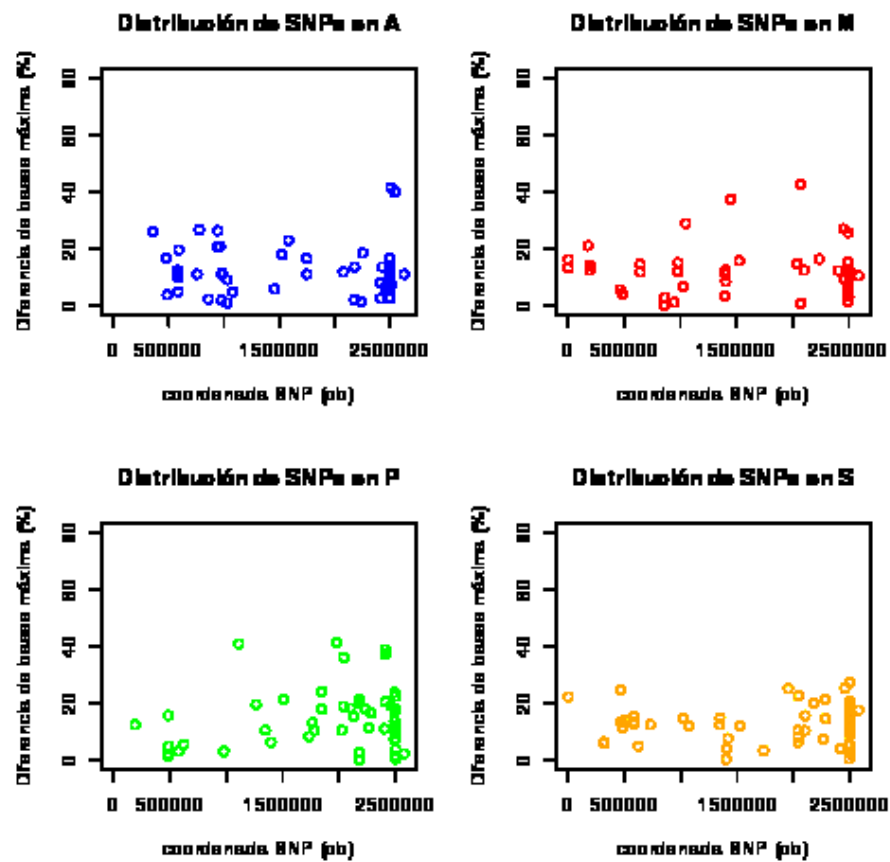
### CROMOSOMA 24



### CROMOSOMA 26



### CROMOSOMA 26



## Anexo 5

### Tabla de mutaciones

Lines	Gen ID	Coordinate in chromosome	Position in gene	Mutation	Kind of mutation	Gene function
A	LinJ.02.0670	310127	404	-	Synonymous	hypothetical protein, conserved
A	LinJ.02.0710	324141	1544	-	Synonymous	dipeptylcarboxypeptidase (DCP)
A	LinJ.04.0610	250494	1581	G528S	Amino acid change	hypothetical protein
A	LinJ.07.1080	487232	500	E167D	Amino acid change	hypothetical protein, conserved
A	LinJ.08.0790	334514	15	G6S	Amino acid change	amastin-like protein
A	LinJ.08.0790	334520	21	I8L	Amino acid change	amastin-like protein
A	LinJ.08.0960	410373	1092	M365V	Amino acid change	cathepsin L-like protease
A	LinJ.09.1371	505960	75	D26N	Amino acid change	hypothetical protein
A	LinJ.09.1371	505976	59	-	Synonymous	hypothetical protein
A	LinJ.09.1460	528555	59	-	Synonymous	hypothetical protein, conserved
A	LinJ.09.1470	530277	718	S240F	Amino acid change	hypothetical protein, unknown function
A	LinJ.09.rRNA3	413253	63	R22G	Amino acid change	5S(M5) ribosomal RNA
A	LinJ.10.0170	67835	142	Q48L	Amino acid change	hypothetical protein
A	LinJ.10.0520	216971	886	H296R	Amino acid change	GP63, leishmanolysin, metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
A	LinJ.10.0521	220320	275	-	Synonymous	hypothetical protein, unknown function
A	LinJ.11.1240	513754	1757	-	Synonymous	ATP-binding cassette protein subfamily A, member 4, putative, ABC transporter, putative (ABCA4)
A	LinJ.11.1250	520783	1045	-	Synonymous	ABC transporter-like protein
A	LinJ.12.0480	298019	191	-	Synonymous	vacuolar ATP synthase subunit, putative
A	LinJ.12.0666	411373	301	G101D	Amino acid change	surface antigen protein 2, putative
A	LinJ.12.0666	411495	423	G142R	Amino acid change	surface antigen protein 2, putative
A	LinJ.12.0671	431822	211	L71S	Amino acid change	surface antigen protein, putative
A	LinJ.12.0690	438599	192	A65T	Amino acid change	surface antigen protein 2 precursor
A	LinJ.12.0690	438605	198	D67N	Amino acid change	surface antigen protein 2 precursor
A	LinJ.12.0690	438607	200	D67E	Amino acid change	surface antigen protein 2 precursor
A	LinJ.13.1630	635235	1322	-	Synonymous	phosphoprotein phosphatase-like protein

A	LinJ.13.1630	635236	1321	V441G	Amino acid change	phosphoprotein phosphatase-like protein
A	LinJ.14.0330	97820	199	R67H	Amino acid change	hypothetical protein, unknown function
A	LinJ.14.0370	120097	1714	A572V	Amino acid change	hypothetical protein, conserved
A	LinJ.14.1180	477307	22	A8V	Amino acid change	kinesin K39, putative
A	LinJ.14.1180	478417	1132	Q378L	Amino acid change	kinesin K39, putative
A	LinJ.14.1180	478603	1318	M440T	Amino acid change	kinesin K39, putative
A	LinJ.14.1190	491942	3032	-	Synonymous	kinesin K39, putative
A	LinJ.14.1190	496747	7837	K2613R	Amino acid change	kinesin K39, putative
A	LinJ.14.1540	616030	2470	G824D	Amino acid change	hypothetical protein, conserved
A	LinJ.15.1340	531939	4207	R1403Q	Amino acid change	Eukaryotic translation initiation factor 4 gamma type 2, putative (eif4g2)
A	LinJ.16.1120	420992	1133	E378D	Amino acid change	hypothetical protein, conserved
A	LinJ.17.0140	56705	2712	L905F	Amino acid change	receptor-type adenylate cyclase b (RAC-B2)
A	LinJ.17.1090	467162	13806	R4603C	Amino acid change	hypothetical protein, conserved
A	LinJ.17.1090	467169	13813	G4605A	Amino acid change	hypothetical protein, conserved
A	LinJ.17.1160	503570	1879	V627A	Amino acid change	hydrolase-like protein,esterase-like protein
A	LinJ.17.1180	510844	867	R290S	Amino acid change	hypothetical protein, unknown function
A	LinJ.17.1180	511473	1496	-	Synonymous	hypothetical protein, unknown function
A	LinJ.17.1300	565486	284	-	Synonymous	hypothetical protein, conserved
A	LinJ.18.1220	503794	799	T267M	Amino acid change	prolyl-tRNA synthetase, putative,bifunctional aminoacyl-tRNA synthetase, putative
A	LinJ.19.0280	105677	2541	G848R	Amino acid change	hypothetical protein, conserved
A	LinJ.19.0380	156410	660	L221V	Amino acid change	hypothetical protein, conserved
A	LinJ.19.1680	689129	4647	L1550V	Amino acid change	hypothetical protein
A	LinJ.20.0860	338038	68	-	Synonymous	pseudouridine synthase TruD, putative
A	LinJ.20.1070	439992	455	-	Synonymous	CMP-sialic acid transporter, putative
A	LinJ.20.1740	718260	1438	G480V	Amino acid change	aminoacylase, putative,N-acyl-L-amino acid amidohydrolase, putative
A	LinJ.20.1740	718261	1437	G480R	Amino acid change	aminoacylase, putative,N-acyl-L-amino acid amidohydrolase, putative
A	LinJ.21.0010	3907	1658	-	Synonymous	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
A	LinJ.21.0020	7736	36	S13R	Amino acid change	histone H4

A	LinJ.22.0240	132270	503	-	Synonymous	hypothetical protein, conserved
A	LinJ.22.0270	140137	1265	-	Synonymous	DNA primase small subunit, putative
A	LinJ.22.0290	151859	510	V171I	Amino acid change	hypothetical protein, conserved
A	LinJ.22.0390	185609	1303	A435E	Amino acid change	hypothetical protein, conserved
A	LinJ.22.0420	196712	611	-	Synonymous	hypothetical protein, conserved
A	LinJ.22.0640	289026	2421	V808L	Amino acid change	hypothetical protein, conserved
A	LinJ.22.0660	294197	1490	-	Synonymous	5%27a2rel-related protein
A	LinJ.22.0660	295045	2338	P780R	Amino acid change	5%27a2rel-related protein
A	LinJ.22.0890	396299	1046	-	Synonymous	hypothetical protein, conserved
A	LinJ.22.0890	396302	1049	-	Synonymous	hypothetical protein, conserved
A	LinJ.22.1180	515897	1497	T500A	Amino acid change	hypothetical protein, conserved
A	LinJ.22.1570	118215	1205	M402I	Amino acid change	hypothetical protein
A	LinJ.23.0230	71640	2438	-	Synonymous	ATP-binding cassette protein subfamily C, member 1, putative (ABCC1)
A	LinJ.24.1970	738859	811	R271H	Amino acid change	hypothetical protein, conserved
A	LinJ.24.2100	775585	278	-	Synonymous	tubulin folding cofactor D, putative
A	LinJ.24.2250	816577	423	-	Synonymous	hypothetical protein, conserved
A	LinJ.24.2260	820042	1388	-	Synonymous	hypothetical protein, conserved
A	LinJ.25.2540	874341	119	M40I	Amino acid change	aminopeptidase P1, putative,metallo-peptidase, Clan MG, Family M24
A	LinJ.25.2570	880641	60	P21T	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 6 (SCG6)
A	LinJ.26.0500	136993	2300	-	Synonymous	hypothetical protein, conserved (pseudogene)
A	LinJ.27.0010	5370	562	E188G	Amino acid change	hypothetical protein, conserved
A	LinJ.27.0020	8032	2075	-	Synonymous	hypothetical protein, conserved
A	LinJ.27.0040	13271	695	-	Synonymous	CAAX prenyl protease 1, putative,metallo-peptidase, Clan M-, Family M48
A	LinJ.27.0100	26475	1533	-	Synonymous	protein kinase, putative
A	LinJ.27.0110	29019	131	-	Synonymous	hypothetical protein, conserved
A	LinJ.27.0140	36021	217	T73R	Amino acid change	hypothetical protein, conserved
A	LinJ.27.0150	38190	500	-	Synonymous	hypothetical protein, conserved
A	LinJ.27.rRNA4	179972	1693	-	Synonymous	28S ribosomal RNA (LSU-alpha)
A	LinJ.27.rRNA6	182929	1304	-	Synonymous	18S ribosomal (SSU) RNA

A	LinJ.28.0490	166357	522	A175T	Amino acid change	hypothetical protein, unknown function
A	LinJ.28.1490	519552	143	-	Synonymous	haloacid dehalogenase-like hydrolase-like protein
A	LinJ.28.1730	613717	820	R274K	Amino acid change	helicase-like protein
A	LinJ.28.1870	684701	37	M13T	Amino acid change	hypothetical protein, conserved
A	LinJ.28.1870	684717	21	-	Synonymous	hypothetical protein, conserved
A	LinJ.28.1880	688306	2669	-	Synonymous	protein kinase, putative
A	LinJ.29.0210	69302	3836	-	Synonymous	hypothetical protein, conserved
A	LinJ.29.1330	493656	1818	I607V	Amino acid change	hypothetical protein, unknown function
A	LinJ.29.1340	498479	2625	T876A	Amino acid change	hypothetical protein, unknown function
A	LinJ.29.1340	499178	3324	D1109Y	Amino acid change	hypothetical protein, unknown function
A	LinJ.29.1460	576634	1640	-	Synonymous	RNA binding protein, putative
A	LinJ.29.1580	679926	60	A21P	Amino acid change	hypothetical protein, conserved
A	LinJ.29.1580	679943	43	G15E	Amino acid change	hypothetical protein, conserved
A	LinJ.29.1750	751373	413	-	Synonymous	hypothetical protein, conserved
A	LinJ.29.2100	870739	3687	F1230L	Amino acid change	hypothetical protein, conserved
A	LinJ.29.2100	871403	3023	-	Synonymous	hypothetical protein, conserved
A	LinJ.29.2100	873109	1317	T440A	Amino acid change	hypothetical protein, conserved
A	LinJ.29.2100	873941	485	-	Synonymous	hypothetical protein, conserved
A	LinJ.29.2240	944569	6	T3A	Amino acid change	hypothetical protein, conserved
A	LinJ.29.2710	1129406	954	L319V	Amino acid change	poly(A) polymerase, putative
A	LinJ.29.2870	1180785	1619	-	Synonymous	hypothetical protein, conserved
A	LinJ.30.1510	515313	1468	E490G	Amino acid change	kinesin, putative
A	LinJ.30.1540	526848	391	G131A	Amino acid change	hypothetical protein, conserved
A	LinJ.30.1630	564468	607	R203H	Amino acid change	ferric reductase, putative
A	LinJ.30.1810	629141	1332	T445A	Amino acid change	hypothetical protein, conserved
A	LinJ.30.1890	673586	1669	G557V	Amino acid change	hypothetical protein, conserved
A	LinJ.30.1890	674790	2873	-	Synonymous	hypothetical protein, conserved
A	LinJ.30.1900	677180	419	-	Synonymous	hypothetical protein, unknown function
A	LinJ.30.1900	677711	950	-	Synonymous	hypothetical protein, unknown function
A	LinJ.30.2010	715836	311	-	Synonymous	hypothetical protein, unknown function
A	LinJ.30.2010	717325	1800	C601R	Amino acid change	hypothetical protein, unknown function
A	LinJ.30.2040	728550	1833	P612S	Amino acid change	calpain-like cysteine peptidase, putative, cysteine peptidase,



						Clan CA, family C2, putative
A	LinJ.30.2040	728584	1867	S623F	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
A	LinJ.30.2040	729699	2982	V995I	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
A	LinJ.30.2040	730025	3308	-	Synonymous	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
A	LinJ.30.2550	950099	1578	A527T	Amino acid change	hypothetical protein, conserved
A	LinJ.30.2620	982570	767	-	Synonymous	replication factor C, subunit 2, putative
A	LinJ.30.3110	1119800	76	A26G	Amino acid change	hypothetical protein, conserved
A	LinJ.30.3160	1137979	624	V209M	Amino acid change	S-adenosylmethionine decarboxylase proenzyme- like, putative
A	LinJ.30.3440	1241254	377	-	Synonymous	CAS%2FCSE%2Fimportin domain protein, putative
A	LinJ.30.3470	1254932	67	L23P	Amino acid change	hypothetical protein, conserved
A	LinJ.30.3670	1317019	803	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.0480	161156	522	-	Synonymous	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
A	LinJ.31.0690	240328	39	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.0710	248120	529	Q177P	Amino acid change	hypothetical protein, conserved
A	LinJ.31.0720	249453	1445	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.0720	250659	239	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.0750	267046	1005	P336S	Amino acid change	hypothetical protein, conserved
A	LinJ.31.0790	280787	706	G236D	Amino acid change	hypothetical protein, unknown function
A	LinJ.31.1000	369285	1514	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.1000	369897	902	E301D	Amino acid change	hypothetical protein, conserved
A	LinJ.31.1040	401536	622	P208L	Amino acid change	hypothetical protein, conserved
A	LinJ.31.1150	439221	803	-	Synonymous	monoglyceride lipase, putative
A	LinJ.31.1150	439695	329	-	Synonymous	monoglyceride lipase, putative
A	LinJ.31.1230	461213	14135	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.1230	467198	8150	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.1230	467239	8109	T2704S	Amino acid change	hypothetical protein, conserved
A	LinJ.31.1230	469430	5918	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.1300	511080	3824	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative

						(ABCC5)
A	LinJ.31.1300	512952	1952	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
A	LinJ.31.1340	540783	2852	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.1470	656670	452	-	Synonymous	hypothetical protein, unknown function
A	LinJ.31.1490	673357	853	R285Q	Amino acid change	surface membrane protein gp46-like protein
A	LinJ.31.1920	908840	1112	-	Synonymous	mannosyltransferase-like protein
A	LinJ.31.2130	995639	1046	-	Synonymous	hypothetical protein, conserved
A	LinJ.31.2550	1213898	1209	L404M	Amino acid change	hypothetical protein, conserved
A	LinJ.31.2750	1280848	605	-	Synonymous	hypothetical protein, unknown function
A	LinJ.31.3320	1459018	146	-	Synonymous	histone H4
A	LinJ.31.3400	27724	1459	S487N	Amino acid change	sodium stibogluconate resistance protein, putative
A	LinJ.31.3400	27726	1457	-	Synonymous	sodium stibogluconate resistance protein, putative
A	LinJ.32.0480	178955	1177	K393R	Amino acid change	hypothetical protein, conserved
A	LinJ.32.0490	182310	558	M187V	Amino acid change	hypothetical protein, conserved
A	LinJ.32.0500	183650	29	-	Synonymous	hypothetical protein, conserved
A	LinJ.32.0570	198112	1390	S464N	Amino acid change	hypothetical protein, conserved
A	LinJ.32.1050	403204	838	V280A	Amino acid change	hypothetical protein, conserved
A	LinJ.32.1280	481386	2315	-	Synonymous	hypothetical protein, conserved
A	LinJ.32.1520	571923	8349	P2784S	Amino acid change	phosphatidylinositol 3-related kinase, putative
A	LinJ.32.1670	630810	175	P59H	Amino acid change	helicase-like protein, DNA repair and recombination protein, mitochondrial precursor, putative
A	LinJ.33.2400	917926	1090	V364A	Amino acid change	hypothetical protein, conserved
A	LinJ.33.3050	1242142	713	-	Synonymous	hypothetical protein, unknown function
A	LinJ.33.3050	1243796	2367	F790L	Amino acid change	hypothetical protein, unknown function
A	LinJ.33.3050	1245307	3878	-	Synonymous	hypothetical protein, unknown function
A	LinJ.33.3230	1378108	3343	P1115Q	Amino acid change	hypothetical protein, conserved
A	LinJ.33.3230	1378216	3451	P1151L	Amino acid change	hypothetical protein, conserved
A	LinJ.34.0310	107000	1488	A497T	Amino acid change	hypothetical protein, conserved
A	LinJ.34.0310	107023	1511	-	Synonymous	hypothetical protein, conserved
A	LinJ.34.0310	107314	1802	-	Synonymous	hypothetical protein, conserved
A	LinJ.34.0320	110481	1616	-	Synonymous	hypothetical protein, conserved

A	LinJ.34.0330	113520	1294	V432A	Amino acid change	hypothetical protein, conserved
A	LinJ.34.0330	114199	1973	-	Synonymous	hypothetical protein, conserved
A	LinJ.34.0340	117060	857	-	Synonymous	hypothetical protein, conserved
A	LinJ.34.0380	129503	140	-	Synonymous	DNA-directed RNA polymerase III subunit C1, putative,DNA-directed RNA polymerase III largest subunit, putative (RPC1)
A	LinJ.34.0470	155476	514	S172L	Amino acid change	hypothetical protein, unknown function
A	LinJ.34.0530	202773	1442	-	Synonymous	phosphoglycan beta 1,2 arabinosyltransferase, (SCA like) (SCAL)
A	LinJ.34.1730	727534	147	L50M	Amino acid change	amastin-like surface protein, putative
A	LinJ.34.1730	727676	5	-	Synonymous	amastin-like surface protein, putative
A	LinJ.34.3750	1511170	5895	-	Synonymous	target of rapamycin kinase (TOR) kinase 3, putative,phosphatidylinositol 3-kinase-like protei (TOR3)
A	LinJ.35.0930	388929	1768	V590G	Amino acid change	hypothetical protein, conserved
A	LinJ.35.3370	1343945	425	-	Synonymous	transport protein particle (TRAPP) subunit, putative
A	LinJ.35.4450	1742999	994	Q332L	Amino acid change	hypothetical protein, conserved
A	LinJ.35.4450	1743003	998	-	Synonymous	hypothetical protein, conserved
A	LinJ.35.4980	1894839	971	-	Synonymous	tubulin tyrosine ligase, putative
A	LinJ.35.5000	1905636	2474	-	Synonymous	hypothetical protein, conserved
A	LinJ.35.5080	1952329	12147	G4050S	Amino acid change	hypothetical protein, conserved
A	LinJ.35.5340	2036112	739	A247V	Amino acid change	hypothetical protein, conserved
A	LinJ.36.2080	775895	532	G178D	Amino acid change	hypothetical protein, conserved
A	LinJ.36.6760	2495168	838	D280G	Amino acid change	mitogen activated protein kinase homologue,map-kinase homologue (LMPK)
A	LinJ.36.6900	2541879	809	L270F	Amino acid change	hypothetical protein, conserved
A	LinJ.36.7180	2629391	2346	T783A	Amino acid change	hypothetical protein, conserved
A,M	LinJ.02.0130	57899	4139	-	Synonymous	hypothetical protein, conserved
A-M	LinJ.03.0420	144618	296	-	Synonymous	60S acidic ribosomal protein P2, putative (mRNA)
A,M	LinJ.04.0160	50725	560	-	Synonymous	hypothetical protein, conserved in leishmania
A,M	LinJ.04.0600	247179	227	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.04.0610	249643	2432	-	Synonymous	hypothetical protein
A,M	LinJ.04.0610	250052	2023	R675Q	Amino acid change	hypothetical protein
A,M	LinJ.04.0610	250158	1917	A640T	Amino acid change	hypothetical protein

A,M	LinJ.06.1360	519720	942	S315P	Amino acid change	hypothetical protein, conserved
A,M	LinJ.08.0350	120884	8132	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.08.0350	122171	9419	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.08.0420	162787	2987	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.08.0760	324480	332	-	Synonymous	amastin-like protein
A,M	LinJ.08.0960	410330	1135	S379N	Amino acid change	cathepsin L-like protease
A,M	LinJ.08.1130	468464	1217	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.08.1290	488101	212	-	Synonymous	beta tubulin
A,M	LinJ.10.0130	51220	470	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.10.0520	216897	812	-	Synonymous	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
A,M	LinJ.10.0520	216928	843	P282S	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
A,M	LinJ.10.1460	542600	758	-	Synonymous	fatty acid desaturase, putative
A,M	LinJ.11.1210	494707	5035	A1679V	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
A,M	LinJ.12.0666	411571	499	G167A	Amino acid change	surface antigen protein 2, putative
A,M	LinJ.12.0666	411599	527	-	Synonymous	surface antigen protein 2, putative
A,M	LinJ.12.0666	411720	648	K217Q	Amino acid change	surface antigen protein 2, putative
A,M	LinJ.12.0669	425436	110	R37S	Amino acid change	hypothetical protein, conserved
A,M	LinJ.13.0740	269732	135	T46A	Amino acid change	hypothetical protein, conserved
A,M	LinJ.15.1180	473356	161	-	Synonymous	protein kinase, putative
A,M	LinJ.17.1140	494575	46	A16V	Amino acid change	hydrolase-like protein
A,M	LinJ.17.1140	494745	216	-	Synonymous	hydrolase-like protein
A,M	LinJ.17.1170	506450	311	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.19.0380	157720	1970	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.19.0860	356657	39	P14A	Amino acid change	ATG8%2FAUT7%2FAPG8%2FPAZ2, putative (ATG8B.3)
A,M	LinJ.19.0860	356680	62	-	Synonymous	ATG8%2FAUT7%2FAPG8%2FPAZ2, putative (ATG8B.3)
A,M	LinJ.19.1670	678971	158	-	Synonymous	hypothetical protein, unknown function
A,M	LinJ.20.0280	86104	12613	E4205G	Amino acid change	Midasin, putative (MDN1)
A,M	LinJ.22.0270	141224	178	V60E	Amino acid change	DNA primase small subunit, putative
A,M	LinJ.22.0370	180937	161	-	Synonymous	protein kinase, putative

A,M	LinJ.22.0390	185619	1293	G432S	Amino acid change	hypothetical protein, conserved
A,M	LinJ.22.0640	288650	2045	Q682H	Amino acid change	hypothetical protein, conserved
A,M	LinJ.22.1570	117850	1570	N524S	Amino acid change	hypothetical protein
A,M	LinJ.24.0360	119476	1395	T466A	Amino acid change	CMP-sialic acid transporter, putative
A,M	LinJ.24.2040	755580	1645	L549R	Amino acid change	hypothetical protein, conserved
A,M	LinJ.24.2100	773735	2128	V710A	Amino acid change	tubulin folding cofactor D, putative
A,M	LinJ.24.2190	793424	751	W251S	Amino acid change	hypothetical protein, conserved
A,M	LinJ.24.2260	818990	2440	L814Q	Amino acid change	hypothetical protein, conserved
A,M	LinJ.24.2260	819553	1877	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.24.2260	820018	1412	H471Q	Amino acid change	hypothetical protein, conserved
A,M	LinJ.24.2260	820320	1110	V371L	Amino acid change	hypothetical protein, conserved
A,M	LinJ.25.2550	877406	831	V278L	Amino acid change	tagatose-6-phosphate kinase-like protein
A,M	LinJ.25.2560	878390	21	A8T	Amino acid change	histone H4
A,M	LinJ.27.0140	36012	226	K76R	Amino acid change	hypothetical protein, conserved
A,M	LinJ.27.0830	414186	3854	-	Synonymous	ATP-binding cassette protein subfamily A, member 8, putative (ABCA8)
A,M	LinJ.27.0830	414188	3852	V1285I	Amino acid change	ATP-binding cassette protein subfamily A, member 8, putative (ABCA8)
A,M	LinJ.27.rRNA4	180094	1571	-	Synonymous	28S ribosomal RNA (LSU-alpha)
A,M	LinJ.27.rRNA6	183169	1064	-	Synonymous	18S ribosomal (SSU) RNA
A,M	LinJ.27.rRNA6	183827	406	-	Synonymous	18S ribosomal (SSU) RNA
A,M	LinJ.27.rRNA6	183830	403	-	Synonymous	18S ribosomal (SSU) RNA
A,M	LinJ.27.rRNA6	183888	345	-	Synonymous	18S ribosomal (SSU) RNA
A,M	LinJ.27.rRNA6	183892	341	-	Synonymous	18S ribosomal (SSU) RNA
A,M	LinJ.27.rRNA6	184000	233	-	Synonymous	18S ribosomal (SSU) RNA
A,M	LinJ.27.rRNA6	184175	58	-	Synonymous	18S ribosomal (SSU) RNA
A,M	LinJ.28.0490	166291	456	V153M	Amino acid change	hypothetical protein, unknown function
A,M	LinJ.28.0820	290366	70	A24G	Amino acid change	hypothetical protein, conserved
A,M	LinJ.28.1140	389426	318	V107L	Amino acid change	hypothetical protein, conserved
A,M	LinJ.28.1730	612754	1783	V595E	Amino acid change	helicase-like protein
A,M	LinJ.28.1750	619295	256	I86T	Amino acid change	hypothetical protein, conserved
A,M	LinJ.28.1880	688341	2634	P879S	Amino acid change	protein kinase, putative

A,M	LinJ.28.1880	690328	647	-	Synonymous	protein kinase, putative
A,M	LinJ.29.1090	390216	1628	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.29.1340	498507	2653	A885V	Amino acid change	hypothetical protein, unknown function
A,M	LinJ.29.1340	499226	3372	R1125C	Amino acid change	hypothetical protein, unknown function
A,M	LinJ.29.1460	574997	3	Q2K	Amino acid change	RNA binding protein, putative
A,M	LinJ.29.1560	670947	2462	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.29.1560	672518	891	G298S	Amino acid change	hypothetical protein, conserved
A,M	LinJ.29.1760	761616	366	P123S	Amino acid change	hypothetical protein, conserved
A,M	LinJ.29.2100	873907	519	A174T	Amino acid change	hypothetical protein, conserved
A,M	LinJ.30.1510	515430	1585	E529V	Amino acid change	kinesin, putative
A,M	LinJ.30.1520	521693	277	G93A	Amino acid change	p1%2Fs1 nuclease
A,M	LinJ.30.1520	521695	279	S94T	Amino acid change	p1%2Fs1 nuclease
A,M	LinJ.30.1520	521969	553	S185W	Amino acid change	p1%2Fs1 nuclease
A,M	LinJ.30.1520	522312	896	-	Synonymous	p1%2Fs1 nuclease
A,M	LinJ.30.1530	525256	977	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.30.1540	526663	206	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.30.1540	528138	1681	P561L	Amino acid change	hypothetical protein, conserved
A,M	LinJ.30.1630	566358	2497	E833A	Amino acid change	ferric reductase, putative
A,M	LinJ.30.1630	566360	2499	P834S	Amino acid change	ferric reductase, putative
A,M	LinJ.30.1890	671991	74	E25D	Amino acid change	hypothetical protein, conserved
A,M	LinJ.30.2040	728988	2271	P758T	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
A,M	LinJ.30.2040	729819	3102	F1035V	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
A,M	LinJ.30.2590	974048	1859	-	Synonymous	formate--tetrahydrofolate ligase (FTHS)
A,M	LinJ.30.2590	975464	443	-	Synonymous	formate--tetrahydrofolate ligase (FTHS)
A,M	LinJ.30.2610	981049	644	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.30.2610	981596	97	M33T	Amino acid change	hypothetical protein, conserved
A,M	LinJ.30.2630	986156	467	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.30.2630	986175	448	N150S	Amino acid change	hypothetical protein, conserved
A,M	LinJ.30.3120	1122702	24	-	Synonymous	homoserine kinase, putative
A,M	LinJ.30.3470	1256268	1403	-	Synonymous	hypothetical protein, conserved

A,M	LinJ.31.0720	249497	1401	G468S	Amino acid change	hypothetical protein, conserved
A,M	LinJ.31.0720	249801	1097	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.31.0720	249942	956	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.31.0970	360422	120	S41P	Amino acid change	hypothetical protein, conserved
A,M	LinJ.31.1000	368644	2155	I719T	Amino acid change	hypothetical protein, conserved
A,M	LinJ.31.1000	369840	959	N320K	Amino acid change	hypothetical protein, conserved
A,M	LinJ.31.1150	439716	308	-	Synonymous	monoglyceride lipase, putative
A,M	LinJ.31.1230	460790	14558	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.31.1230	466739	8609	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.31.1230	471096	4252	R1418H	Amino acid change	hypothetical protein, conserved
A,M	LinJ.31.1250	483698	2215	L739P	Amino acid change	hypothetical protein, unknown function
A,M	LinJ.31.1300	513687	1217	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
A,M	LinJ.31.1300	514312	592	T198R	Amino acid change	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
A,M	LinJ.31.1330	532116	1513	P505L	Amino acid change	hypothetical protein, conserved
A,M	LinJ.31.1330	532431	1198	S400T	Amino acid change	hypothetical protein, conserved
A,M	LinJ.31.1330	532499	1130	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.31.1340	538454	5181	S1728P	Amino acid change	hypothetical protein, conserved
A,M	LinJ.31.1490	673370	840	L281F	Amino acid change	surface membrane protein gp46-like protein
A,M	LinJ.32.0380	137801	2392	V798E	Amino acid change	hypothetical protein, conserved
A,M	LinJ.32.0510	184225	1061	Q354H	Amino acid change	hypothetical protein, conserved
A,M	LinJ.32.0520	187767	590	-	Synonymous	Ras-related protein Rab4, putative (RAB4)
A,M	LinJ.32.1450	547446	2132	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.33.2920	1149415	8329	R2777H	Amino acid change	hypothetical protein, conserved
A,M	LinJ.33.3230	1378617	3852	H1285Y	Amino acid change	hypothetical protein, conserved
A,M	LinJ.34.0320	109485	620	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.34.0470	157436	2474	-	Synonymous	hypothetical protein, unknown function
A,M	LinJ.34.0480	160886	1339	R447Q	Amino acid change	hypothetical protein, unknown function
A,M	LinJ.34.0480	162408	2861	-	Synonymous	hypothetical protein, unknown function
A,M	LinJ.34.0500	179619	1433	-	Synonymous	calcium channel protein, putative,ion transporter, putative
A,M	LinJ.34.0500	185010	6824	-	Synonymous	calcium channel protein, putative,ion transporter, putative

A,M	LinJ.34.1730	727493	188	-	Synonymous	amastin-like surface protein, putative
A,M	LinJ.34.3490	1425771	478	V160A	Amino acid change	hypothetical protein, conserved
A,M	LinJ.34.3510	1429465	26	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.34.4090	1621947	4479	E1494*	STOP	Unc104-like kinesin, putative
A,M	LinJ.35.0350	90310	1250	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.35.4000	1543406	804	L269F	Amino acid change	PRP8 protein homologue, putative,U5 snRNA-associated splicing factor
A,M	LinJ.35.4220	1644193	1898	-	Synonymous	elongation factor 1-alpha, putative,hsp70 subfamily B suppressor 1
A,M	LinJ.35.5340	2036117	744	P249S	Amino acid change	hypothetical protein, conserved
A,M	LinJ.35.5350	2039008	107	-	Synonymous	hypothetical protein, conserved
A,M	LinJ.35.5350	2040152	1251	K418Q	Amino acid change	hypothetical protein, conserved
A,M	LinJ.36.6750	2492735	552	H185Y	Amino acid change	hypothetical protein, unknown function
A,M,P	LinJ.29.1980	833146	732	A245S	Amino acid change	hypothetical protein, conserved
A,M,P	LinJ.32.1050	404215	1849	G617D	Amino acid change	hypothetical protein, conserved
A,M,P	LinJ.34.0360	124262	920	-	Synonymous	hypothetical protein, conserved
A,M,S	LinJ.02.0680	315769	1517	-	Synonymous	ATP-dependent Clp protease subunit, heat shock protein 78 (HSP78), putative
A,M,S	LinJ.29.2100	872441	1985	E662D	Amino acid change	hypothetical protein, conserved
A,M,S	LinJ.29.2310	981103	2101	-	Synonymous	GTP-binding protein, putative
A,M,S	LinJ.31.1300	513936	968	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
A,M,W T	LinJ.11.1230	503554	2245	V749A	Amino acid change	ATP-binding cassette protein subfamily A, member 3, putative (ABCA3)
A,P	LinJ.02.0670	312471	2748	A917T	Amino acid change	hypothetical protein, conserved
A,P	LinJ.04.0560	229758	645	T216A	Amino acid change	hypothetical protein, conserved
A,P	LinJ.04.0590	244890	74	-	Synonymous	hypothetical protein
A,P	LinJ.04.0610	248575	3500	-	Synonymous	hypothetical protein
A,P	LinJ.04.0870	334859	912	I305V	Amino acid change	hypothetical protein
A,P	LinJ.04.0920	355593	4	E2A	Amino acid change	hypothetical protein
A,P	LinJ.05.0720	261879	256	Q86R	Amino acid change	phosphatase-like protein
A,P	LinJ.08.0360	130641	2321	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.08.0420	159828	28	S10L	Amino acid change	hypothetical protein, conserved



A,P	LinJ.08.0650	271331	36	S13C	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.10.0410	177830	980	-	Synonymous	folate%2Fbiopterin transporter, putative
A,P	LinJ.10.1450	537346	443	-	Synonymous	pteridine transporter, putative
A,P	LinJ.11.1210	493428	3756	L1253F	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
A,P	LinJ.11.1210	493747	4075	E1359G	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
A,P	LinJ.11.1250	520456	718	-	Synonymous	ABC transporter-like protein
A,P	LinJ.12.0662	388601	589	V197A	Amino acid change	surface antigen protein 2, putative
A,P	LinJ.12.0690	439174	767	-	Synonymous	surface antigen protein 2 precursor
A,P	LinJ.14.1190	496516	7606	K2536R	Amino acid change	kinesin K39, putative
A,P	LinJ.16.0180	63652	1959	A654T	Amino acid change	hypothetical protein, conserved
A,P	LinJ.16.1760	691406	5784	Y1929H	Amino acid change	hypothetical protein, conserved
A,P	LinJ.19.0380	156108	358	T120M	Amino acid change	hypothetical protein, conserved
A,P	LinJ.19.0380	160210	4460	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.19.0380	161450	5700	M1901V	Amino acid change	hypothetical protein, conserved
A,P	LinJ.20.0380	121317	308	W103C	Amino acid change	hypothetical protein, conserved
A,P	LinJ.22.0400	189904	1582	V528A	Amino acid change	hypothetical protein, conserved
A,P	LinJ.22.0420	195915	1408	S470C	Amino acid change	hypothetical protein, conserved
A,P	LinJ.22.0500	220531	3384	D1129N	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.22.1570	117903	1517	M506I	Amino acid change	hypothetical protein
A,P	LinJ.23.0810	311889	407	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.23.1220	497944	493	R165H	Amino acid change	hydrophilic acylated surface protein b (HASPb)
A,P	LinJ.24.1970	737656	2014	T672N	Amino acid change	hypothetical protein, conserved
A,P	LinJ.24.1970	737657	2013	T672A	Amino acid change	hypothetical protein, conserved
A,P	LinJ.24.2260	819596	1834	G612D	Amino acid change	hypothetical protein, conserved
A,P	LinJ.24.2260	820358	1072	E358A	Amino acid change	hypothetical protein, conserved
A,P	LinJ.26.0500	136878	2415	-	Synonymous	hypothetical protein, conserved (pseudogene)
A,P	LinJ.27.0020	8050	2057	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.27.0020	8313	1794	V599I	Amino acid change	hypothetical protein, conserved
A,P	LinJ.28.0630	225086	956	D319E	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.28.1500	524780	797	-	Synonymous	hypothetical protein, conserved

A,P	LinJ.28.1730	612208	2329	P777L	Amino acid change	helicase-like protein
A,P	LinJ.28.1730	612837	1700	-	Synonymous	helicase-like protein
A,P	LinJ.28.1730	613545	992	-	Synonymous	helicase-like protein
A,P	LinJ.28.1810	651589	5027	-	Synonymous	sulfate transporter-like protein
A,P	LinJ.28.1880	687539	3436	P1146Q	Amino acid change	protein kinase, putative
A,P	LinJ.28.3260	1162740	1562	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.29.1340	496257	403	L135P	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.29.1340	497976	2122	V708A	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.29.1340	498187	2333	R778S	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.29.1340	499355	3501	H1168D	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.29.1340	500071	4217	-	Synonymous	hypothetical protein, unknown function
A,P	LinJ.29.1460	575238	244	V82A	Amino acid change	RNA binding protein, putative
A,P	LinJ.29.1560	673197	212	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.29.1560	673346	63	M22L	Amino acid change	hypothetical protein, conserved
A,P	LinJ.29.1760	756664	5318	N1773K	Amino acid change	hypothetical protein, conserved
A,P	LinJ.29.1760	759571	2411	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.29.1760	761839	143	M48I	Amino acid change	hypothetical protein, conserved
A,P	LinJ.29.1770	764154	2246	-	Synonymous	Zn-finger domain protein, putative
A,P	LinJ.29.1770	764227	2173	D725G	Amino acid change	Zn-finger domain protein, putative
A,P	LinJ.29.1980	832370	1508	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.29.2190	913852	1323	L442V	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.29.2270	963963	23	-	Synonymous	rab-GDP dissociation inhibitor, putative
A,P	LinJ.29.2770	1151799	1718	-	Synonymous	helicase, putative
A,P	LinJ.29.3020	194617	513	-	Synonymous	tuzin like protein, putative (pseudogene)
A,P	LinJ.29.3030	198447	724	A242V	Amino acid change	amastin, putative
A,P	LinJ.29.3030	198929	242	-	Synonymous	amastin, putative
A,P	LinJ.30.0330	104175	2576	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.30.1890	672005	88	G30D	Amino acid change	hypothetical protein, conserved
A,P	LinJ.30.1890	674258	2341	R781P	Amino acid change	hypothetical protein, conserved
A,P	LinJ.30.1900	677009	248	-	Synonymous	hypothetical protein, unknown function
A,P	LinJ.30.2020	720448	175	R59P	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.30.2020	720486	213	E72K	Amino acid change	hypothetical protein, unknown function

A,P	LinJ.30.2550	951310	367	H123R	Amino acid change	hypothetical protein, conserved
A,P	LinJ.30.3430	1237473	1322	-	Synonymous	PAS-domain containing phosphoglycerate kinase, putative
A,P	LinJ.30.3470	1256595	1730	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.0690	239840	527	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.0720	250161	737	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.0980	362978	1102	R368K	Amino acid change	hypothetical protein, conserved
A,P	LinJ.31.0980	363259	821	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1000	368688	2111	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1000	369681	1118	E373D	Amino acid change	hypothetical protein, conserved
A,P	LinJ.31.1000	369759	1040	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1000	369843	956	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1010	372782	1133	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1010	372809	1106	E369D	Amino acid change	hypothetical protein, conserved
A,P	LinJ.31.1010	372999	916	S306C	Amino acid change	hypothetical protein, conserved
A,P	LinJ.31.1080	414998	1241	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1110	429430	94	V32A	Amino acid change	hypothetical protein, conserved
A,P	LinJ.31.1230	461396	13952	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1230	466763	8585	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1230	467083	8265	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1230	472894	2454	V819I	Amino acid change	hypothetical protein, conserved
A,P	LinJ.31.1290	503813	4507	T1503M	Amino acid change	p-glycoprotein e (ABCC4)
A,P	LinJ.31.1290	505826	2494	T832I	Amino acid change	p-glycoprotein e (ABCC4)
A,P	LinJ.31.1290	505942	2378	-	Synonymous	p-glycoprotein e (ABCC4)
A,P	LinJ.31.1290	506711	1609	K537T	Amino acid change	p-glycoprotein e (ABCC4)
A,P	LinJ.31.1320	525512	1307	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1340	537657	5978	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.31.1340	537968	5667	S1890P	Amino acid change	hypothetical protein, conserved
A,P	LinJ.31.2080	979343	305	N102K	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.31.2290	1093290	4689	S1564G	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.32.0380	137971	2222	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.32.0490	182297	571	H191P	Amino acid change	hypothetical protein, conserved
A,P	LinJ.32.0510	184402	884	-	Synonymous	hypothetical protein, conserved

A,P	LinJ.32.0510	184405	881	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.32.0530	188878	491	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.32.0540	190235	506	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.32.0630	214147	1808	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.32.1050	403985	1619	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.32.1050	404825	2459	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.32.1120	424640	50	-	Synonymous	dynein, putative
A,P	LinJ.32.1520	574857	5415	A1806T	Amino acid change	phosphatidylinositol 3-related kinase, putative
A,P	LinJ.32.1520	576599	3673	E1225A	Amino acid change	phosphatidylinositol 3-related kinase, putative
A,P	LinJ.33.3050	1244363	2934	I979F	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.33.3050	1244695	3266	-	Synonymous	hypothetical protein, unknown function
A,P	LinJ.33.3230	1377969	3204	N1069D	Amino acid change	hypothetical protein, conserved
A,P	LinJ.33.3230	1378109	3344	-	Synonymous	hypothetical protein, conserved
A,P	LinJ.34.0500	178476	290	M97I	Amino acid change	calcium channel protein, putative,ion transporter, putative
A,P	LinJ.34.0500	179020	834	I279L	Amino acid change	calcium channel protein, putative,ion transporter, putative
A,P	LinJ.34.2360	1002606	2767	E923G	Amino acid change	hypothetical protein, unknown function
A,P	LinJ.34.2660	1138078	738	S247A	Amino acid change	amastin-like surface protein, putative
A,P	LinJ.34.4340	61755	248	-	Synonymous	amastin-like surface protein, putative
A,P	LinJ.35.3050	1222467	20	W7C	Amino acid change	hypothetical protein, conserved
A,P	LinJ.35.5010	1910833	462	T155A	Amino acid change	hypothetical protein, conserved
A,P	LinJ.35.5340	2035936	563	H188Q	Amino acid change	hypothetical protein, conserved
A,P,S	LinJ.05.0670	227345	2504	-	Synonymous	hypothetical protein, conserved
A,P,S	LinJ.17.1180	511906	1929	T644A	Amino acid change	hypothetical protein, unknown function
A,P,S	LinJ.27.0090	22541	1760	-	Synonymous	cytochrome p450-like protein
A,P,S	LinJ.29.1340	498438	2584	H862R	Amino acid change	hypothetical protein, unknown function
A,P,S	LinJ.29.1760	757405	4577	-	Synonymous	hypothetical protein, conserved
A,P,S	LinJ.29.1760	760372	1610	-	Synonymous	hypothetical protein, conserved
A,P,S	LinJ.29.1770	764136	2264	-	Synonymous	Zn-finger domain protein, putative
A,P,S	LinJ.29.1770	764419	1981	A661V	Amino acid change	Zn-finger domain protein, putative
A,P,S	LinJ.29.2100	873113	1313	-	Synonymous	hypothetical protein, conserved
A,P,S	LinJ.36.6760	2495095	911	-	Synonymous	mitogen activated protein kinase homologue,map-kinase homologue (LMPK)

A,P,WT	LinJ.17.1170	506780	641	-	Synonymous	hypothetical protein, conserved
A,P,WT	LinJ.17.1510	630322	238	A80D	Amino acid change	myo-inositol-1(or 4)-monophosphatase 1, putative
A,P,WT	LinJ.28.1810	650689	5927	-	Synonymous	sulfate transporter-like protein
A,P,WT	LinJ.31.1320	525774	1045	L349P	Amino acid change	hypothetical protein, conserved
A,P,WT	LinJ.33.3050	1243911	2482	V828A	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.05.0670	225089	248	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.05.0670	226192	1351	A451V	Amino acid change	hypothetical protein, conserved
A,S	LinJ.08.0350	125596	12844	A4282E	Amino acid change	hypothetical protein, conserved
A,S	LinJ.08.0380	139288	281	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.08.0960	410756	709	Q237R	Amino acid change	cathepsin L-like protease
A,S	LinJ.08.0960	410905	560	-	Synonymous	cathepsin L-like protease
A,S	LinJ.08.0960	410908	557	-	Synonymous	cathepsin L-like protease
A,S	LinJ.09.0040	10409	714	P239A	Amino acid change	hypothetical protein, conserved
A,S	LinJ.09.1371	506016	19	P7H	Amino acid change	hypothetical protein
A,S	LinJ.09.1460	527248	1366	F456S	Amino acid change	hypothetical protein, conserved
A,S	LinJ.10.0240	91954	765	V256M	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.10.0510	213506	552	D185N	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
A,S	LinJ.11.1210	494453	4781	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
A,S	LinJ.11.1240	516978	4981	A1661V	Amino acid change	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
A,S	LinJ.11.1250	520398	660	-	Synonymous	ABC transporter-like protein
A,S	LinJ.12.0666	411717	645	T216A	Amino acid change	surface antigen protein 2, putative
A,S	LinJ.12.0690	438830	423	R142G	Amino acid change	surface antigen protein 2 precursor
A,S	LinJ.12.0690	438889	482	S161R	Amino acid change	surface antigen protein 2 precursor
A,S	LinJ.12.0700	445992	302	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.12.0830	529807	1725	G576S	Amino acid change	puromycin-sensitive aminopeptidase-like protein,metallo-peptidase, Clan MA(E), Family M1
A,S	LinJ.17.1140	494858	329	-	Synonymous	hydrolase-like protein
A,S	LinJ.17.1160	503664	1973	-	Synonymous	hydrolase-like protein,esterase-like protein
A,S	LinJ.17.1180	511397	1420	V474A	Amino acid change	hypothetical protein, unknown function

A,S	LinJ.18.0130	42904	367	T123N	Amino acid change	hypothetical protein, conserved
A,S	LinJ.18.0370	152661	377	H126Q	Amino acid change	tubulin tyrosine ligase protein, putative
A,S	LinJ.18.0680	278886	555	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.18.0700	288884	1055	-	Synonymous	citrate synthase, putative
A,S	LinJ.19.0360	140460	3855	A1286T	Amino acid change	protein kinase, putative
A,S	LinJ.19.0380	159427	3677	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.19.0380	161338	5588	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.19.0660	290046	992	-	Synonymous	DNA-directed RNA polymerases I and III subunit RPAC1, putative (RPC40)
A,S	LinJ.20.0280	88079	10638	A3547T	Amino acid change	Midasin, putative (MDN1)
A,S	LinJ.20.0280	90634	8083	Q2695R	Amino acid change	Midasin, putative (MDN1)
A,S	LinJ.21.0010	3218	2347	T783R	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
A,S	LinJ.22.0400	190388	1098	L367V	Amino acid change	hypothetical protein, conserved
A,S	LinJ.22.0420	196982	341	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.22.1570	117742	1678	R560I	Amino acid change	hypothetical protein
A,S	LinJ.24.0440	154240	1805	-	Synonymous	hypothetical predicted transmembrane protein
A,S	LinJ.24.1970	737238	2432	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.24.2100	775110	753	V252M	Amino acid change	tubulin folding cofactor D, putative
A,S	LinJ.24.2100	775333	530	-	Synonymous	tubulin folding cofactor D, putative
A,S	LinJ.24.2250	816599	401	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.25.2550	877455	880	Q294R	Amino acid change	tagatose-6-phosphate kinase-like protein
A,S	LinJ.25.2570	882332	1751	-	Synonymous	phosphoglycan beta 1,3 galactosyltransferase 6 (SCG6)
A,S	LinJ.27.0100	27004	1004	-	Synonymous	protein kinase, putative
A,S	LinJ.28.1490	519767	358	S120C	Amino acid change	haloacid dehalogenase-like hydrolase-like protein
A,S	LinJ.28.1730	614223	314	-	Synonymous	helicase-like protein
A,S	LinJ.28.1880	688266	2709	A904S	Amino acid change	protein kinase, putative
A,S	LinJ.29.1340	496953	1099	A367V	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.29.1340	497248	1394	-	Synonymous	hypothetical protein, unknown function
A,S	LinJ.29.1340	497818	1964	K655N	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.29.1340	497820	1966	T656N	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.29.2310	981123	2081	-	Synonymous	GTP-binding protein, putative
A,S	LinJ.29.2770	1150965	884	-	Synonymous	helicase, putative

A,S	LinJ.30.1510	515312	1467	E490K	Amino acid change	kinesin, putative
A,S	LinJ.30.1510	517115	3270	V1091I	Amino acid change	kinesin, putative
A,S	LinJ.30.1520	522144	728	-	Synonymous	p1%2Fs1 nuclease
A,S	LinJ.30.1530	524725	446	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.30.1540	528861	2404	S802N	Amino acid change	hypothetical protein, conserved
A,S	LinJ.30.1900	677366	605	I202M	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.30.1900	677635	874	T292K	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.30.2010	717920	2395	H799R	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.30.2010	717971	2446	G816V	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.30.2020	721148	875	-	Synonymous	hypothetical protein, unknown function
A,S	LinJ.30.2040	727016	299	N100K	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
A,S	LinJ.30.2550	948958	2719	V907A	Amino acid change	hypothetical protein, conserved
A,S	LinJ.30.2560	962181	242	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.30.2660	990700	1148	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.30.3110	1119205	671	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.30.3130	1125949	242	-	Synonymous	RNA-binding protein 42 (RNA-binding motif protein 42), putative
A,S	LinJ.31.0460	154115	559	K187T	Amino acid change	amastin, putative
A,S	LinJ.31.0460	154543	131	-	Synonymous	amastin, putative
A,S	LinJ.31.0680	233207	191	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.31.0690	236409	3958	R1320H	Amino acid change	hypothetical protein, conserved
A,S	LinJ.31.0720	249813	1085	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.31.0720	250311	587	I196M	Amino acid change	hypothetical protein, conserved
A,S	LinJ.31.0730	251554	2651	-	Synonymous	ATP-dependent zinc metallopeptidase, putative,metallo-peptidase, Clan MA(E), Family M41
A,S	LinJ.31.0750	266641	1410	Y471H	Amino acid change	hypothetical protein, conserved
A,S	LinJ.31.0750	267913	138	N47Y	Amino acid change	hypothetical protein, conserved
A,S	LinJ.31.0790	280778	715	T239I	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.31.0790	280944	549	N184D	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.31.0790	280948	545	-	Synonymous	hypothetical protein, unknown function
A,S	LinJ.31.0980	361846	2234	-	Synonymous	hypothetical protein, conserved

A,S	LinJ.31.1010	373761	154	T52N	Amino acid change	hypothetical protein, conserved
A,S	LinJ.31.1030	391808	84	A29T	Amino acid change	hypothetical protein, conserved
A,S	LinJ.31.1030	391819	73	L25P	Amino acid change	hypothetical protein, conserved
A,S	LinJ.31.1130	433057	1184	-	Synonymous	N-acyl-L-amino acid amidohydrolase, putative
A,S	LinJ.31.1150	439148	876	M293L	Amino acid change	monoglyceride lipase, putative
A,S	LinJ.31.1230	474686	662	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.31.1290	506140	2180	-	Synonymous	p-glycoprotein e (ABCC4)
A,S	LinJ.31.1300	513507	1397	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
A,S	LinJ.31.1320	524066	2753	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.31.1320	525839	980	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.31.1470	656505	617	R206S	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.31.1810	830955	1184	-	Synonymous	amino acid permease (AAT8.1)
A,S	LinJ.32.0380	138627	1566	T523A	Amino acid change	hypothetical protein, conserved
A,S	LinJ.32.0380	139132	1061	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.32.0450	170799	833	F278L	Amino acid change	hypothetical protein, conserved
A,S	LinJ.32.0450	170817	815	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.32.0450	171149	483	P162S	Amino acid change	hypothetical protein, conserved
A,S	LinJ.32.0510	185279	7	A3V	Amino acid change	hypothetical protein, conserved
A,S	LinJ.32.0570	197231	509	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.32.0610	208731	1015	N339S	Amino acid change	hypothetical protein, conserved
A,S	LinJ.32.1040	396696	206	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.32.1060	406961	986	-	Synonymous	chaperonin containing t-complex protein, putative
A,S	LinJ.32.1100	419964	1161	L388F	Amino acid change	hypothetical protein, conserved
A,S	LinJ.32.1510	569769	12	S5R	Amino acid change	hypothetical protein, conserved
A,S	LinJ.32.1520	578966	1306	P436H	Amino acid change	phosphatidylinositol 3-related kinase, putative
A,S	LinJ.32.2030	753371	1250	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.32.3470	1311254	440	-	Synonymous	chaperonin alpha subunit, putative
A,S	LinJ.33.3050	1246209	4780	A1594V	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.33.3050	1247399	5970	L1991M	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.34.0310	107228	1716	P573A	Amino acid change	hypothetical protein, conserved
A,S	LinJ.34.0320	110101	1236	R413C	Amino acid change	hypothetical protein, conserved



A,S	LinJ.35.5020	1912519	611	-	Synonymous	hypothetical protein, conserved
A,S	LinJ.35.5340	2037687	2314	T772N	Amino acid change	hypothetical protein, conserved
A,S	LinJ.36.6750	2492059	1228	L410H	Amino acid change	hypothetical protein, unknown function
A,S	LinJ.36.6760	2495091	915	A306S	Amino acid change	mitogen activated protein kinase homologue,map-kinase homologue (LMPK)
A,S	LinJ.36.6770	2502570	1396	T466I	Amino acid change	histidine secretory acid phosphatase, putative
A,S,WT	LinJ.18.0270	125519	903	M302V	Amino acid change	glycogen synthase kinase 3 (GSK3)
A,S,WT	LinJ.19.1690	717203	4597	S1533I	Amino acid change	hypothetical protein
A,S,WT	LinJ.28.1730	613672	865	R289Q	Amino acid change	helicase-like protein
A,S,WT	LinJ.32.1520	578077	2195	M732I	Amino acid change	phosphatidylinositol 3-related kinase, putative
A,WT	LinJ.04.0610	248626	3449	-	Synonymous	hypothetical protein
A,WT	LinJ.04.0610	248850	3225	H1076Y	Amino acid change	hypothetical protein
A,WT	LinJ.04.0610	250203	1872	A625T	Amino acid change	hypothetical protein
A,WT	LinJ.04.0860	328501	210	P71S	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.06.1360	519583	805	D269A	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.08.0350	124646	11894	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.08.0760	324682	534	D179Y	Amino acid change	amastin-like protein
A,WT	LinJ.09.1460	528484	130	T44N	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.09.1470	530288	707	N236K	Amino acid change	hypothetical protein, unknown function
A,WT	LinJ.11.0520	185456	74	K25N	Amino acid change	nucleobase transporter (NT4)
A,WT	LinJ.11.1230	503553	2244	V749M	Amino acid change	ATP-binding cassette protein subfamily A, member 3, putative (ABCA3)
A,WT	LinJ.11.1230	503556	2247	L750M	Amino acid change	ATP-binding cassette protein subfamily A, member 3, putative (ABCA3)
A,WT	LinJ.12.0666	411651	579	V194I	Amino acid change	surface antigen protein 2, putative
A,WT	LinJ.12.0690	438708	301	D101G	Amino acid change	surface antigen protein 2 precursor
A,WT	LinJ.12.0690	439006	599	-	Synonymous	surface antigen protein 2 precursor
A,WT	LinJ.14.1190	491967	3057	A1020T	Amino acid change	kinesin K39, putative
A,WT	LinJ.16.1760	691152	5530	G1844V	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.17.1160	503518	1827	E610K	Amino acid change	hydrolase-like protein,esterase-like protein
A,WT	LinJ.17.1180	510315	338	-	Synonymous	hypothetical protein, unknown function
A,WT	LinJ.17.1510	630367	283	V95A	Amino acid change	myo-inositol-1(or 4)-monophosphatase 1, putative

A,WT	LinJ.22.0240	131931	842	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.22.0290	152366	3	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.22.0390	185818	1094	W365C	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.22.0400	190545	941	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.22.0420	196369	954	A319T	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.22.0500	222153	1762	R588T	Amino acid change	hypothetical protein, unknown function
A,WT	LinJ.22.0500	222496	1419	A474T	Amino acid change	hypothetical protein, unknown function
A,WT	LinJ.22.0500	222516	1399	L467S	Amino acid change	hypothetical protein, unknown function
A,WT	LinJ.22.0650	290523	266	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.22.0650	290532	275	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.22.0660	295133	2426	-	Synonymous	5%27a2rel-related protein
A,WT	LinJ.24.1970	737784	1886	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.24.1970	737814	1856	E619D	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.24.2260	818848	2582	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.25.0360	105568	1450	Q484R	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.26.0500	136785	2508	-	Synonymous	hypothetical protein, conserved (pseudogene)
A,WT	LinJ.27.0160	40926	59	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.27.0510	172169	1184	-	Synonymous	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
A,WT	LinJ.27.2670	258498	749	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.28.1870	682015	2723	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.28.1880	686759	4216	G1406V	Amino acid change	protein kinase, putative
A,WT	LinJ.28.1880	688867	2108	-	Synonymous	protein kinase, putative
A,WT	LinJ.30.1540	529418	2961	H988N	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.30.1890	672751	834	I279V	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.30.1890	673121	1204	P402Q	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.30.1890	674787	2870	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.30.2630	986008	615	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.30.3470	1256267	1402	F468C	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.31.0460	154315	359	-	Synonymous	amastin, putative
A,WT	LinJ.31.0460	154443	231	I78V	Amino acid change	amastin, putative
A,WT	LinJ.31.0480	161576	102	R35C	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase,

						Clan CA, family C2, putative
A,WT	LinJ.31.0640	221380	612	Q205E	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.31.0670	231496	236	-	Synonymous	mitochondrial RNA binding protein, putative
A,WT	LinJ.31.0700	242719	3505	A1169V	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.31.0700	242977	3247	A1083V	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.31.0710	248507	142	E48A	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.31.0750	266801	1250	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.31.0980	361828	2252	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.31.1000	369360	1439	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.31.1130	433630	611	-	Synonymous	N-acyl-L-amino acid amidohydrolase, putative
A,WT	LinJ.31.1230	466691	8657	D2886E	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.31.1230	466988	8360	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.31.1230	471464	3884	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.31.1300	512031	2873	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
A,WT	LinJ.31.1330	533001	628	E210A	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.31.3400	27636	1547	-	Synonymous	sodium stibogluconate resistance protein, putative
A,WT	LinJ.32.0510	184339	947	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.32.1020	377218	5371	C1791S	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.32.2110	783145	2129	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.33.3050	1242359	930	S311P	Amino acid change	hypothetical protein, unknown function
A,WT	LinJ.33.3050	1242695	1266	R423S	Amino acid change	hypothetical protein, unknown function
A,WT	LinJ.33.3050	1243912	2483	-	Synonymous	hypothetical protein, unknown function
A,WT	LinJ.33.3230	1378192	3427	P1143R	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.34.0320	110641	1776	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.34.0330	113845	1619	-	Synonymous	hypothetical protein, conserved
A,WT	LinJ.34.0390	135971	1066	G356V	Amino acid change	hypothetical protein, conserved
A,WT	LinJ.34.0500	184404	6218	-	Synonymous	calcium channel protein, putative, ion transporter, putative phosphoglycan beta 1,2 arabinosyltransferase, (SCA like) (SCAL)
A,WT	LinJ.34.0530	201870	539	-	Synonymous	phosphoglycan beta 1,2 arabinosyltransferase, (SCA like) (SCAL)
A,WT	LinJ.35.0530	218639	877	T293N	Amino acid change	proteophosphoglycan 5
A,WT	LinJ.35.5020	1912156	248	-	Synonymous	hypothetical protein, conserved

A,WT	LinJ.36.6550	2412838	35	-	Synonymous	glucose transporter 2 (GT2)
A,WT	LinJ.36.6770	2502596	1370	-	Synonymous	histidine secretory acid phosphatase, putative
M	LinJ.02.0100	43793	5183	-	Synonymous	phosphatidylinositol kinase related protein, putative
M	LinJ.03.0490	187678	4452	T1485A	Amino acid change	hypothetical protein, conserved
M	LinJ.03.0490	187679	4453	T1485I	Amino acid change	hypothetical protein, conserved
M	LinJ.04.0560	229679	724	G242E	Amino acid change	hypothetical protein, conserved
M	LinJ.04.0590	242946	2018	-	Synonymous	hypothetical protein
M	LinJ.04.0590	244102	862	G288V	Amino acid change	hypothetical protein
M	LinJ.04.0590	244368	596	R199S	Amino acid change	hypothetical protein
M	LinJ.04.0610	250114	1961	-	Synonymous	hypothetical protein
M	LinJ.04.0610	250480	1595	-	Synonymous	hypothetical protein
M	LinJ.04.0870	335633	138	D47H	Amino acid change	hypothetical protein
M	LinJ.04.1200	440760	5802	T1935A	Amino acid change	hypothetical protein, conserved
M	LinJ.06.1360	520646	1868	-	Synonymous	hypothetical protein, conserved
M	LinJ.06.1360	520662	1884	-	Synonymous	hypothetical protein, conserved
M	LinJ.06.1360	520696	1918	K640T	Amino acid change	hypothetical protein, conserved
M	LinJ.08.0350	114943	2191	C731S	Amino acid change	hypothetical protein, conserved
M	LinJ.08.0450	184305	6175	H2059P	Amino acid change	hypothetical protein, conserved
M	LinJ.09.0790	283533	1640	-	Synonymous	ubiquitin ligase, putative
M	LinJ.09.1370	503168	494	-	Synonymous	hypothetical protein, unknown function
M	LinJ.10.0380	157758	1170	A391T	Amino acid change	folate%2Fbiopterin transporter, putative
M	LinJ.10.0390	162820	89	-	Synonymous	folate%2Fbiopterin transporter, putative
M	LinJ.10.0520	216805	720	P241S	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
M	LinJ.10.1460	542513	671	-	Synonymous	fatty acid desaturase, putative
M	LinJ.11.1210	491282	1610	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
M	LinJ.11.1210	494290	4618	A1540V	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
M	LinJ.11.1240	515583	3586	K1196R	Amino acid change	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
M	LinJ.12.0666	411386	314	-	Synonymous	surface antigen protein 2, putative

M	LinJ.12.0668	421020	49	A17V	Amino acid change	surface antigen protein 2, putative
M	LinJ.12.0669	425439	113	-	Synonymous	hypothetical protein, conserved
M	LinJ.12.0690	438506	99	K34E	Amino acid change	surface antigen protein 2 precursor
M	LinJ.12.0690	438686	279	T94S	Amino acid change	surface antigen protein 2 precursor
M	LinJ.12.0690	439431	1024	R342K	Amino acid change	surface antigen protein 2 precursor
M	LinJ.13.0140	42446	435	F146L	Amino acid change	hypothetical protein, conserved
M	LinJ.13.1590	619572	1040	W347*	STOP	phospholipid-transporting ATPase 1-like protein
M	LinJ.14.1180	478485	1200	S401T	Amino acid change	kinesin K39, putative
M	LinJ.14.1190	491816	2906	-	Synonymous	kinesin K39, putative
M	LinJ.14.1190	496584	7674	A2559T	Amino acid change	kinesin K39, putative
M	LinJ.15.0490	168656	3939	T1314A	Amino acid change	hypothetical protein (pseudogene)
M	LinJ.15.0500	176002	618	A207T	Amino acid change	hypothetical protein
M	LinJ.17.0530	215843	2064	A689P	Amino acid change	hypothetical protein, conserved
M	LinJ.17.1140	495785	1256	-	Synonymous	hydrolase-like protein
M	LinJ.17.1360	589535	99	R34G	Amino acid change	hypothetical protein, conserved
M	LinJ.18.1270	524305	1211	-	Synonymous	hypothetical protein, conserved
M	LinJ.19.0380	158435	2685	S896G	Amino acid change	hypothetical protein, conserved
M	LinJ.19.0600	263798	858	M287V	Amino acid change	hypothetical protein, unknown function
M	LinJ.19.1670	678979	166	G56A	Amino acid change	hypothetical protein, unknown function
M	LinJ.19.1680	687554	3072	-	Synonymous	hypothetical protein
M	LinJ.19.1680	687574	3092	-	Synonymous	hypothetical protein
M	LinJ.22.0210	118612	2911	K971R	Amino acid change	hypothetical protein, unknown function
M	LinJ.22.0270	140972	430	N144S	Amino acid change	DNA primase small subunit, putative
M	LinJ.22.0380	182922	1531	K511R	Amino acid change	hypothetical protein, conserved
M	LinJ.22.0380	182927	1526	-	Synonymous	hypothetical protein, conserved
M	LinJ.22.0380	182957	1496	-	Synonymous	hypothetical protein, conserved
M	LinJ.22.0400	189340	2146	V716A	Amino acid change	hypothetical protein, conserved
M	LinJ.22.0660	295606	2899	A967V	Amino acid change	5%27a2rel-related protein
M	LinJ.22.1180	515132	2262	A755P	Amino acid change	hypothetical protein, conserved
M	LinJ.24.0460	161416	14	-	Synonymous	hypothetical predicted transmembrane protein
M	LinJ.24.1420	504959	882	V295F	Amino acid change	hypothetical protein, conserved
M	LinJ.24.1420	504964	887	D296E	Amino acid change	hypothetical protein, conserved

M	LinJ.24.1420	504965	888	R297G	Amino acid change	hypothetical protein, conserved
M	LinJ.24.1970	739053	617	-	Synonymous	hypothetical protein, conserved
M	LinJ.24.2170	790356	132	P45S	Amino acid change	40S ribosomal protein S8, putative
M	LinJ.24.2260	819160	2270	-	Synonymous	hypothetical protein, conserved
M	LinJ.24.2260	820903	527	-	Synonymous	hypothetical protein, conserved
M	LinJ.25.0130	35980	243	-	Synonymous	elongation factor, putative
M	LinJ.25.0280	79613	1411	D471G	Amino acid change	hypothetical protein, conserved
M	LinJ.25.2570	880734	153	P52S	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 6 (SCG6)
M	LinJ.26.0560	158637	1685	-	Synonymous	spliced leader RNA PSE-promoter transcription factor, putative
M	LinJ.27.0010	5462	470	-	Synonymous	hypothetical protein, conserved
M	LinJ.27.0020	9418	689	-	Synonymous	hypothetical protein, conserved
M	LinJ.27.0030	11292	686	-	Synonymous	hypothetical protein, conserved
M	LinJ.27.0050	14854	2144	-	Synonymous	DEAD-box helicase-like protein
M	LinJ.27.0090	23057	1244	-	Synonymous	cytochrome p450-like protein
M	LinJ.27.0100	27790	218	N73K	Amino acid change	protein kinase, putative
M	LinJ.27.0140	35860	378	G127S	Amino acid change	hypothetical protein, conserved
M	LinJ.27.0430	119910	772	V258A	Amino acid change	ribokinase, putative
M	LinJ.27.0500	146174	165	Q56*	STOP	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
M	LinJ.27.0530	273876	836	-	Synonymous	amino acid permease, putative (AAT23.2)
M	LinJ.27.0530	274288	1248	F417I	Amino acid change	amino acid permease, putative (AAT23.2)
M	LinJ.27.0830	413895	4145	-	Synonymous	ATP-binding cassette protein subfamily A, member 8, putative (ABCA8)
M	LinJ.27.0840	425029	818	-	Synonymous	ATP-binding cassette protein subfamily A, member 9, putative (ABCA9)
M	LinJ.28.0350	113618	1314	H439Y	Amino acid change	hypothetical protein, conserved
M	LinJ.28.0380	131649	2322	A775T	Amino acid change	hypothetical protein, conserved
M	LinJ.28.0380	131918	2591	-	Synonymous	hypothetical protein, conserved
M	LinJ.28.0500	167401	677	E226D	Amino acid change	ubiquitin activating enzyme, putative
M	LinJ.28.0500	167713	365	-	Synonymous	ubiquitin activating enzyme, putative
M	LinJ.28.1810	654304	2312	-	Synonymous	sulfate transporter-like protein
M	LinJ.28.1870	683713	1025	-	Synonymous	hypothetical protein, conserved

M	LinJ.28.1880	686161	4814	E1605D	Amino acid change	protein kinase, putative
M	LinJ.28.1880	687049	3926	-	Synonymous	protein kinase, putative
M	LinJ.28.3260	1161420	242	-	Synonymous	hypothetical protein, conserved
M	LinJ.28.3260	1161628	450	V151M	Amino acid change	hypothetical protein, conserved
M	LinJ.28.3260	1161630	452	-	Synonymous	hypothetical protein, conserved
M	LinJ.28.3260	1161644	466	A156V	Amino acid change	hypothetical protein, conserved
M	LinJ.29.1340	498539	2685	V896M	Amino acid change	hypothetical protein, unknown function
M	LinJ.29.1760	755084	6898	L2300P	Amino acid change	hypothetical protein, conserved
M	LinJ.29.1760	755085	6897	L2300F	Amino acid change	hypothetical protein, conserved
M	LinJ.30.1490	498801	263	E88D	Amino acid change	ama1 protein, putative
M	LinJ.30.1490	498838	300	P101T	Amino acid change	ama1 protein, putative
M	LinJ.30.1490	498840	302	-	Synonymous	ama1 protein, putative
M	LinJ.30.1510	517171	3326	-	Synonymous	kinesin, putative
M	LinJ.30.1520	521786	370	N124S	Amino acid change	p1%2Fs1 nuclease
M	LinJ.30.1520	522135	719	-	Synonymous	p1%2Fs1 nuclease
M	LinJ.30.1540	526573	116	-	Synonymous	hypothetical protein, conserved
M	LinJ.30.1540	529384	2927	-	Synonymous	hypothetical protein, conserved
M	LinJ.30.1580	538869	908	-	Synonymous	protein kinase, putative
M	LinJ.30.1790	620468	1282	S428L	Amino acid change	DNAJ domain protein, putative
M	LinJ.30.2040	730584	3867	F1290L	Amino acid change	calpain-like cysteine peptidase, putative, cysteine peptidase, Clan CA, family C2, putative
M	LinJ.30.2550	949551	2126	-	Synonymous	hypothetical protein, conserved
M	LinJ.30.2580	971401	165	E56K	Amino acid change	hypothetical protein, conserved
M	LinJ.30.2630	984894	1729	K577R	Amino acid change	hypothetical protein, conserved
M	LinJ.30.2670	993552	60	A21S	Amino acid change	hypothetical protein, conserved
M	LinJ.30.2840	1039071	176	-	Synonymous	hypothetical protein, conserved
M	LinJ.30.3470	1255454	589	A197V	Amino acid change	hypothetical protein, conserved
M	LinJ.30.3670	1316824	608	E203D	Amino acid change	hypothetical protein, conserved
M	LinJ.31.0240	62399	1152	A385T	Amino acid change	hypothetical protein, conserved
M	LinJ.31.0460	154275	399	-	Synonymous	amastin, putative
M	LinJ.31.0680	232581	817	H273R	Amino acid change	hypothetical protein, conserved
M	LinJ.31.0690	240024	343	H115R	Amino acid change	hypothetical protein, conserved

M	LinJ.31.0700	243781	2443	A815V	Amino acid change	hypothetical protein, conserved
M	LinJ.31.0720	249943	955	S319F	Amino acid change	hypothetical protein, conserved
M	LinJ.31.0720	250371	527	-	Synonymous	hypothetical protein, conserved
M	LinJ.31.0950	349796	1585	T529K	Amino acid change	sodium stibogluconate resistance protein, putative
M	LinJ.31.1230	472142	3206	D1069E	Amino acid change	hypothetical protein, conserved
M	LinJ.31.1250	483871	2042	-	Synonymous	hypothetical protein, unknown function
M	LinJ.31.1290	505707	2613	A872P	Amino acid change	p-glycoprotein e (ABCC4)
M	LinJ.31.1320	524587	2232	S745P	Amino acid change	hypothetical protein, conserved
M	LinJ.31.1470	656000	1122	R375*	STOP	hypothetical protein, unknown function
M	LinJ.31.1470	656403	719	-	Synonymous	hypothetical protein, unknown function
M	LinJ.31.2290	1094443	3536	-	Synonymous	hypothetical protein, unknown function
M	LinJ.32.0450	171018	614	-	Synonymous	hypothetical protein, conserved
M	LinJ.32.0480	177533	2599	H867R	Amino acid change	hypothetical protein, conserved
M	LinJ.32.0570	196823	101	-	Synonymous	hypothetical protein, conserved
M	LinJ.32.0600	204980	55	G19E	Amino acid change	ATP-dependent RNA helicase-like protein, putative, RNA helicase, putative
M	LinJ.32.0600	205075	150	N51D	Amino acid change	ATP-dependent RNA helicase-like protein, putative, RNA helicase, putative
M	LinJ.32.0620	211263	713	-	Synonymous	hypothetical protein, conserved
M	LinJ.32.1520	578673	1599	-	Synonymous	phosphatidylinositol 3-related kinase, putative
M	LinJ.32.1520	579080	1192	V398A	Amino acid change	phosphatidylinositol 3-related kinase, putative
M	LinJ.32.2010	746233	1027	Q343R	Amino acid change	hypothetical protein, conserved
M	LinJ.32.2420	896950	1032	A345S	Amino acid change	membrane associated protein-like protein
M	LinJ.32.3540	1340611	1526	-	Synonymous	hypothetical protein, conserved
M	LinJ.33.1080	378484	296	-	Synonymous	hypothetical protein, conserved
M	LinJ.33.3050	1244532	3103	L1035S	Amino acid change	hypothetical protein, unknown function
M	LinJ.33.3050	1245426	3997	A1333G	Amino acid change	hypothetical protein, unknown function
M	LinJ.33.3050	1247373	5944	P1982H	Amino acid change	hypothetical protein, unknown function
M	LinJ.33.3230	1376328	1563	P522S	Amino acid change	hypothetical protein, conserved
M	LinJ.33.3230	1378154	3389	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.0150	47984	287	-	Synonymous	malate dehydrogenase
M	LinJ.34.0150	47988	291	N98H	Amino acid change	malate dehydrogenase



M	LinJ.34.0320	110287	1422	A475T	Amino acid change	hypothetical protein, conserved
M	LinJ.34.0360	124118	776	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.0380	131183	1820	-	Synonymous	DNA-directed RNA polymerase III subunit C1, putative,DNA-directed RNA polymerase III largest subunit, putative (RPC1)
M	LinJ.34.0480	160826	1279	T427I	Amino acid change	hypothetical protein, unknown function
M	LinJ.34.0480	160832	1285	A429V	Amino acid change	hypothetical protein, unknown function
M	LinJ.34.0480	161112	1565	-	Synonymous	hypothetical protein, unknown function
M	LinJ.34.0500	179175	989	-	Synonymous	calcium channel protein, putative,ion transporter, putative phosphoglycan beta 1,2 arabinosyltransferase, (SCA like) (SCAL)
M	LinJ.34.0530	201572	241	T81I	Amino acid change	hypothetical protein, unknown function
M	LinJ.34.2360	1002494	2879	-	Synonymous	hypothetical protein, unknown function
M	LinJ.34.3330	1370997	1055	M352I	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3440	1407539	119	-	Synonymous	60S ribosomal protein L21, putative
M	LinJ.34.3480	1420960	497	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.3480	1421146	683	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.3480	1421388	925	R309Q	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3480	1421529	1066	G356V	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3480	1421760	1297	G433A	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3490	1425364	71	L24F	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3490	1425487	194	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.3490	1425599	306	M103V	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3490	1425846	553	E185G	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3490	1426376	1083	E362K	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3490	1426463	1170	S391A	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3490	1426647	1354	G452D	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3490	1426664	1371			hypothetical protein, conserved
M	LinJ.34.3500	1428149	102	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.3500	1428307	260	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.3500	1428591	544	D182G	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3510	1429639	200	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.3510	1430103	664	M222T	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3520	1431655	540	Q181K	Amino acid change	hypothetical protein, conserved

M	LinJ.34.3520	1432060	945	L316V	Amino acid change	hypothetical protein, conserved
M	LinJ.34.3530	1433250	392	-	Synonymous	serine palmitoyltransferase-like protein
M	LinJ.34.3530	1433667	809	-	Synonymous	serine palmitoyltransferase-like protein
M	LinJ.34.3530	1434231	1373	-	Synonymous	serine palmitoyltransferase-like protein
M	LinJ.34.3540	1437893	585	N196H	Amino acid change	hypothetical protein
M	LinJ.34.3540	1438607	1299	P434S	Amino acid change	hypothetical protein
M	LinJ.34.3800	1533547	435	C146R	Amino acid change	adaptor gamma-1 chain, putative
M	LinJ.34.3970	1582774	875	-	Synonymous	hypothetical protein, conserved
M	LinJ.34.3990	1595779	8382	R2795C	Amino acid change	Cytoplasmic dynein 2 heavy chain (DYNC2H1), putative
M	LinJ.34.4340	61988	481	V161A	Amino acid change	amastin-like surface protein, putative
M	LinJ.35.0010	4056	698	-	Synonymous	phosphoglycan beta 1,3 galactosyltransferase 7 (SCG7)
M	LinJ.35.0490	152318	1979	-	Synonymous	proteophosphoglycan ppg4
M	LinJ.35.0490	152360	2021	-	Synonymous	proteophosphoglycan ppg4
M	LinJ.35.4450	1742998	993	Q332K	Amino acid change	hypothetical protein, conserved
M	LinJ.35.5340	2037267	1894	C632Y	Amino acid change	hypothetical protein, conserved
M	LinJ.35.5340	2037345	1972	S658L	Amino acid change	hypothetical protein, conserved
M	LinJ.35.5350	2039121	220	R74Q	Amino acid change	hypothetical protein, conserved
M	LinJ.35.5350	2040340	1439	-	Synonymous	hypothetical protein, conserved
M	LinJ.35.5350	2040457	1556	-	Synonymous	hypothetical protein, conserved
M	LinJ.36.6540	2407311	1046	-	Synonymous	glucose transporter 3 (GT3)
M	LinJ.36.6770	2502181	1785	A596T	Amino acid change	histidine secretory acid phosphatase, putative
M,P	LinJ.03.0220	59416	1352	-	Synonymous	long chain fatty Acyl CoA synthetase, putative
M,P	LinJ.04.0590	243696	1268	S423R	Amino acid change	hypothetical protein
M,P	LinJ.04.0610	248419	3656	S1219R	Amino acid change	hypothetical protein
M,P	LinJ.04.0610	250043	2032	R678H	Amino acid change	hypothetical protein
M,P	LinJ.04.0610	250907	1168	V390A	Amino acid change	hypothetical protein
M,P	LinJ.05.0670	227886	3045	R1016W	Amino acid change	hypothetical protein, conserved
M,P	LinJ.07.0990	424056	3877	R1293Q	Amino acid change	hypothetical protein, conserved
M,P	LinJ.08.0410	155519	621	V208M	Amino acid change	hypothetical protein, conserved
M,P	LinJ.08.0960	410969	496	A166V	Amino acid change	cathepsin L-like protease
M,P	LinJ.09.1371	505263	772	G258D	Amino acid change	hypothetical protein
M,P	LinJ.09.1450	523830	1307	-	Synonymous	hypothetical protein, conserved

M,P	LinJ.10.0510	213305	351	P118S	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
M,P	LinJ.10.0520	217372	1287	T430A	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
M,P	LinJ.10.1450	537394	491	-	Synonymous	pteridine transporter, putative
M,P	LinJ.11.1210	494646	4974	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
M,P	LinJ.11.1260	524220	1838	H613Q	Amino acid change	ATP-binding cassette protein subfamily A, member 5, putative (ABCA5)
M,P	LinJ.12.0663	396084	1667	-	Synonymous	surface antigen protein 2, putative
M,P	LinJ.12.0690	439160	753	A252T	Amino acid change	surface antigen protein 2 precursor
M,P	LinJ.12.0700	446155	465	P156S	Amino acid change	hypothetical protein, conserved
M,P	LinJ.12.0830	531552	3470	-	Synonymous	puromycin-sensitive aminopeptidase-like protein,metallo-peptidase, Clan MA(E), Family M1
M,P	LinJ.13.0070	16114	97	T33M	Amino acid change	hypothetical protein, unknown function
M,P	LinJ.14.1190	493243	4333	K1445R	Amino acid change	kinesin K39, putative
M,P	LinJ.14.1190	497125	8215	R2739K	Amino acid change	kinesin K39, putative
M,P	LinJ.17.1170	507608	1469	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.17.1170	507614	1475	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.17.1230	529633	239	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.19.0360	140741	4136	-	Synonymous	protein kinase, putative
M,P	LinJ.19.0380	161233	5483	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.19.0760	334239	809	-	Synonymous	transporter, putative
M,P	LinJ.20.1070	440185	648	-	Synonymous	CMP-sialic acid transporter, putative
M,P	LinJ.22.0100	85708	1342	G448D	Amino acid change	amino acid permease, putative (AAT22)
M,P	LinJ.22.0400	189139	2347	G783E	Amino acid change	hypothetical protein, conserved
M,P	LinJ.22.0400	190209	1277	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.22.0400	190733	753	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.22.0420	195833	1490	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.22.0500	221499	2416	G806D	Amino acid change	hypothetical protein, unknown function
M,P	LinJ.22.0500	221684	2231	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.22.0500	223163	752	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.22.0960	436821	5	-	Synonymous	adaptor complex AP-1 medium subunit, putative,Mu-adaptin 1,

						putative
M,P	LinJ.24.2100	775714	149	N50K	Amino acid change	tubulin folding cofactor D, putative
M,P	LinJ.24.2260	821311	119	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.25.1030	375719	802	D268G	Amino acid change	hypothetical protein, conserved
M,P	LinJ.25.2570	880996	415	P139L	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 6 (SCG6)
M,P	LinJ.25.2570	882366	1785	F596I	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 6 (SCG6)
M,P	LinJ.26.snoRNA2	633527	224	-	Synonymous	LM26Cs1H3
M,P	LinJ.27.0020	10047	60	V21M	Amino acid change	hypothetical protein, conserved
M,P	LinJ.27.0020	7273	2834	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.27.0190	46918	242	-	Synonymous	proteasome alpha 7 subunit, putative
M,P	LinJ.27.1950	865217	476	-	Synonymous	branched-chain amino acid aminotransferase, putative
M,P	LinJ.28.1360	479676	423	A142T	Amino acid change	hypothetical protein, conserved
M,P	LinJ.28.1730	613047	1490	-	Synonymous	helicase-like protein
M,P	LinJ.28.1740	615704	960	G321S	Amino acid change	hypothetical protein, conserved
M,P	LinJ.28.1740	615782	882	E295K	Amino acid change	hypothetical protein, conserved
M,P	LinJ.28.1870	682157	2581	V861A	Amino acid change	hypothetical protein, conserved
M,P	LinJ.28.1870	683728	1010	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.28.1870	684090	648	S217R	Amino acid change	hypothetical protein, conserved
M,P	LinJ.28.1880	686683	4292	-	Synonymous	protein kinase, putative
M,P	LinJ.28.1880	687100	3875	-	Synonymous	protein kinase, putative
M,P	LinJ.28.1880	689354	1621	E541G	Amino acid change	protein kinase, putative
M,P	LinJ.29.1340	498137	2283	A762T	Amino acid change	hypothetical protein, unknown function
M,P	LinJ.29.1560	671927	1482	L495V	Amino acid change	hypothetical protein, conserved
M,P	LinJ.29.2770	1152842	2761	V921G	Amino acid change	helicase, putative
M,P	LinJ.30.0330	106377	374	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.30.0330	106405	346	A116V	Amino acid change	hypothetical protein, conserved
M,P	LinJ.30.1520	521871	455	-	Synonymous	p1%2Fs1 nuclease
M,P	LinJ.30.1530	524999	720	R241S	Amino acid change	hypothetical protein, conserved
M,P	LinJ.30.1540	527143	686	L229F	Amino acid change	hypothetical protein, conserved
M,P	LinJ.30.1880	670440	488	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.30.1900	676799	38	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.30.1900	677559	798	T267A	Amino acid change	hypothetical protein, unknown function

M,P	LinJ.30.2010	716097	572	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.30.2010	716967	1442	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.30.2040	730274	3557	-	Synonymous	calpain-like cysteine peptidase, putative, cysteine peptidase, Clan CA, family C2, putative
M,P	LinJ.30.2050	732961	504	C169S	Amino acid change	ferric reductase transmembrane protein-like protein
M,P	LinJ.30.2200	797065	259	G87V	Amino acid change	RNA-binding protein, putative
M,P	LinJ.30.2370	878190	764	S255R	Amino acid change	zinc-finger protein, conserved
M,P	LinJ.30.2570	968840	212	-	Synonymous	reticulon domain protein, 22 kDa potentially aggravating protein (pale22) (PAPLE22)
M,P	LinJ.30.2630	985772	851	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.30.3120	1122463	263	-	Synonymous	homoserine kinase, putative
M,P	LinJ.31.0690	240118	249	A84P	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.0720	250367	531	A178T	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.0720	250798	100	G34V	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.1080	413573	2666	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.31.1230	469740	5608	S1870N	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.1230	471260	4088	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.31.1230	474901	447	L150F	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.1270	497695	46	K16R	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.1290	507308	1012	F338S	Amino acid change	p-glycoprotein e (ABCC4)
M,P	LinJ.31.1290	508188	132	R45C	Amino acid change	p-glycoprotein e (ABCC4)
M,P	LinJ.31.1300	512676	2228	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
M,P	LinJ.31.1320	525367	1452	T485A	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.1320	525427	1392	A465T	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.1340	537635	6000	S2001P	Amino acid change	hypothetical protein, conserved
M,P	LinJ.31.1470	656190	932	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.31.1880	872836	1676	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.31.2060	973872	1196	-	Synonymous	succinyl-diaminopimelate desuccinylase-like protein
M,P	LinJ.32.0220	69935	1517	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.32.0510	185244	42	S15P	Amino acid change	hypothetical protein, conserved
M,P	LinJ.32.0570	197085	363	F122L	Amino acid change	hypothetical protein, conserved

M,P	LinJ.32.1280	480048	977	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.32.1520	574557	5715	-	Synonymous	phosphatidylinositol 3-related kinase, putative
M,P	LinJ.32.1520	578011	2261	-	Synonymous	phosphatidylinositol 3-related kinase, putative
M,P	LinJ.32.1530	582320	710	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.32.1530	582731	299	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.33.3050	1243727	2298	L767F	Amino acid change	hypothetical protein, unknown function
M,P	LinJ.33.3050	1245219	3790	P1264L	Amino acid change	hypothetical protein, unknown function
M,P	LinJ.33.3050	1246084	4655	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.33.3050	1246103	4674	S1559T	Amino acid change	hypothetical protein, unknown function
M,P	LinJ.34.0310	106609	1097	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.34.0320	110007	1142	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.34.0470	157325	2363	-	Synonymous	hypothetical protein, unknown function
M,P	LinJ.34.0500	178656	470	-	Synonymous	calcium channel protein, putative,ion transporter, putative
M,P	LinJ.34.0530	201555	224	-	Synonymous	phosphoglycan beta 1,2 arabinosyltransferase, (SCA like) (SCAL)
M,P	LinJ.34.0530	202339	1008	P337S	Amino acid change	phosphoglycan beta 1,2 arabinosyltransferase, (SCA like) (SCAL)
M,P	LinJ.34.3520	1431969	854	H285Q	Amino acid change	hypothetical protein, conserved
M,P	LinJ.34.3740	1500295	866	-	Synonymous	expression site-associated protein 5 (ESAG5), putative
M,P	LinJ.35.5000	1903257	95	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.35.5340	2036950	1577	-	Synonymous	hypothetical protein, conserved
M,P	LinJ.35.5350	2039366	465	S156G	Amino acid change	hypothetical protein, conserved
M,P,S	LinJ.10.0521	220783	738	P247S	Amino acid change	hypothetical protein, unknown function
M,P,S	LinJ.29.1760	755320	6662	-	Synonymous	hypothetical protein, conserved
M,P,W T	LinJ.19.0780	337847	593	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.02.0100	39632	9344	-	Synonymous	phosphatidylinositol kinase related protein, putative
M,S	LinJ.04.0560	226375	4028	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.04.0590	242606	2358	I787V	Amino acid change	hypothetical protein
M,S	LinJ.04.0590	243749	1215	V406F	Amino acid change	hypothetical protein
M,S	LinJ.04.0590	244125	839	-	Synonymous	hypothetical protein
M,S	LinJ.04.0590	244158	806	-	Synonymous	hypothetical protein

M,S	LinJ.04.0590	244718	246	S83P	Amino acid change	hypothetical protein
M,S	LinJ.05.0670	226729	1888	A630G	Amino acid change	hypothetical protein, conserved
M,S	LinJ.05.0670	226732	1891	R631H	Amino acid change	hypothetical protein, conserved
M,S	LinJ.09.1450	524262	875	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.10.0260	101545	1808	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.10.0380	157298	710	-	Synonymous	folate%2Fbiopterin transporter, putative
M,S	LinJ.10.0530	223968	1567	R523H	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-4)
M,S	LinJ.11.1210	491066	1394	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
M,S	LinJ.11.1210	491505	1833	A612T	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
M,S	LinJ.12.0580	349151	715	N239T	Amino acid change	alanine aminotransferase (ALAT)
M,S	LinJ.12.0663	395868	1451	-	Synonymous	surface antigen protein 2, putative
M,S	LinJ.12.0667	413958	534	Q179*	STOP	hypothetical protein
M,S	LinJ.12.0690	438906	499	G167A	Amino acid change	surface antigen protein 2 precursor
M,S	LinJ.12.0690	439516	1109	-	Synonymous	surface antigen protein 2 precursor
M,S	LinJ.17.0140	56713	2704	T902I	Amino acid change	receptor-type adenylate cyclase b (RAC-B2)
M,S	LinJ.17.1140	495461	932	I311M	Amino acid change	hydrolase-like protein
M,S	LinJ.17.1150	497223	533	-	Synonymous	hydrolase-like protein,esterase-like protein
M,S	LinJ.19.0380	158773	3023	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.19.0380	161234	5484	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.19.0780	337742	488	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.19.1670	679097	284	-	Synonymous	hypothetical protein, unknown function
M,S	LinJ.19.1690	717235	4629	-	Synonymous	hypothetical protein
M,S	LinJ.19.1690	717248	4642	L1548P	Amino acid change	hypothetical protein
M,S	LinJ.20.1070	440180	643	-	Synonymous	CMP-sialic acid transporter, putative
M,S	LinJ.22.0270	140120	1282	A428V	Amino acid change	DNA primase small subunit, putative
M,S	LinJ.22.0300	154319	3822	E1275K	Amino acid change	hypothetical protein
M,S	LinJ.22.0430	199088	1795	Q599R	Amino acid change	kinesin, putative
M,S	LinJ.22.0660	296211	3504	T1169A	Amino acid change	5%27a2rel-related protein
M,S	LinJ.22.0680	305823	1803	S602P	Amino acid change	3%27a2rel-related protein

M,S	LinJ.24.2100	775621	242	-	Synonymous	tubulin folding cofactor D, putative
M,S	LinJ.24.2180	792282	204	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.25.0280	80306	718	G240D	Amino acid change	hypothetical protein, conserved
M,S	LinJ.26.2180	837597	4333	E1445G	Amino acid change	hypothetical protein, unknown function
M,S	LinJ.27.0030	11234	744	P249S	Amino acid change	hypothetical protein, conserved
M,S	LinJ.27.0530	274164	1124	-	Synonymous	amino acid permease, putative (AAT23.2)
M,S	LinJ.27.0830	413947	4093	V1365A	Amino acid change	ATP-binding cassette protein subfamily A, member 8, putative (ABCA8)
M,S	LinJ.27.1290	574309	3124	A1042D	Amino acid change	protein kinase, putative
M,S	LinJ.28.1730	611694	2843	-	Synonymous	helicase-like protein
M,S	LinJ.28.1860	679633	1455	V486I	Amino acid change	hypothetical protein, conserved
M,S	LinJ.28.1880	686788	4187	-	Synonymous	protein kinase, putative
M,S	LinJ.28.1880	687796	3179	-	Synonymous	protein kinase, putative
M,S	LinJ.28.1880	687832	3143	-	Synonymous	protein kinase, putative
M,S	LinJ.28.1880	688276	2699	L900F	Amino acid change	protein kinase, putative
M,S	LinJ.29.1340	497310	1456	D486V	Amino acid change	hypothetical protein, unknown function
M,S	LinJ.29.1340	497775	1921	L641P	Amino acid change	hypothetical protein, unknown function
M,S	LinJ.29.1560	671077	2332	T778I	Amino acid change	hypothetical protein, conserved
M,S	LinJ.29.2100	873580	846	P283A	Amino acid change	hypothetical protein, conserved
M,S	LinJ.29.2280	966365	221	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.29.2280	966567	19	A7V	Amino acid change	hypothetical protein, conserved
M,S	LinJ.29.2770	1152819	2738	-	Synonymous	helicase, putative
M,S	LinJ.29.2780	1154801	659	-	Synonymous	serine%2Fthreonine-protein kinase Nek3, putative,protein kinase, putative
M,S	LinJ.30.1510	515929	2084	-	Synonymous	kinesin, putative
M,S	LinJ.30.1900	677287	526	L176P	Amino acid change	hypothetical protein, unknown function
M,S	LinJ.30.2040	726977	260	-	Synonymous	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
M,S	LinJ.30.2040	728437	1720	T574K	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
M,S	LinJ.30.2040	729982	3265	I1089T	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
M,S	LinJ.30.2550	948720	2957	-	Synonymous	hypothetical protein, conserved



M,S	LinJ.30.2550	951255	422	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.30.2610	979684	2009	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.30.2670	992614	998	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.30.3130	1126069	122	-	Synonymous	RNA-binding protein 42 (RNA-binding motif protein 42), putative
M,S	LinJ.31.0690	237289	3078	P1027S	Amino acid change	hypothetical protein, conserved
M,S	LinJ.31.0690	239746	621	P208S	Amino acid change	hypothetical protein, conserved
M,S	LinJ.31.0690	240218	149	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.31.0700	244315	1909	E637A	Amino acid change	hypothetical protein, conserved
M,S	LinJ.31.0970	358781	1761	R588W	Amino acid change	hypothetical protein, conserved
M,S	LinJ.31.1000	369078	1721	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.31.1010	373703	212	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.31.1040	401966	192	N65H	Amino acid change	hypothetical protein, conserved
M,S	LinJ.31.1100	427521	599	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.31.1100	427889	231	A78T	Amino acid change	hypothetical protein, conserved
M,S	LinJ.31.1230	460873	14475	R4826G	Amino acid change	hypothetical protein, conserved
M,S	LinJ.31.1230	468674	6674	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.31.1230	469790	5558	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.31.1290	506662	1658	-	Synonymous	p-glycoprotein e (ABCC4)
M,S	LinJ.31.1300	511026	3878	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
M,S	LinJ.32.0380	137802	2391	V798M	Amino acid change	hypothetical protein, conserved
M,S	LinJ.32.0380	139462	731	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.32.0380	140162	31	F11S	Amino acid change	hypothetical protein, conserved
M,S	LinJ.32.0480	178252	1880	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.32.0510	185023	263	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.32.0540	190631	902	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.32.0610	208639	923	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.32.0620	210738	188	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.32.1040	396948	458	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.32.1040	396976	486	A163T	Amino acid change	hypothetical protein, conserved
M,S	LinJ.32.1050	403164	798	R267C	Amino acid change	hypothetical protein, conserved

M,S	LinJ.32.1070	411228	70	G24D	Amino acid change	hypothetical protein, conserved
M,S	LinJ.32.1100	420395	1592	H531Q	Amino acid change	hypothetical protein, conserved
M,S	LinJ.32.1110	422846	416	-	Synonymous	vacuolar sorting-like protein
M,S	LinJ.32.1110	422960	530	-	Synonymous	vacuolar sorting-like protein
M,S	LinJ.32.1280	480657	1586	D529E	Amino acid change	hypothetical protein, conserved
M,S	LinJ.32.1300	485634	543	A182S	Amino acid change	hypothetical protein, conserved
M,S	LinJ.32.1520	578606	1666	D556G	Amino acid change	phosphatidylinositol 3-related kinase, putative
M,S	LinJ.32.1520	579691	581	-	Synonymous	phosphatidylinositol 3-related kinase, putative
M,S	LinJ.32.3790	1431151	333	H112D	Amino acid change	hypothetical protein, conserved
M,S	LinJ.34.0330	113878	1652	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.34.0480	164124	4577	-	Synonymous	hypothetical protein, unknown function
M,S	LinJ.34.3480	1421378	915	G306S	Amino acid change	hypothetical protein, conserved
M,S	LinJ.34.3480	1421444	981	L328V	Amino acid change	hypothetical protein, conserved
M,S	LinJ.34.3480	1421590	1127	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.34.3490	1425457	164	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.35.0370	94065	229	G77D	Amino acid change	ATP-dependent DEAD-box RNA helicase, putative
M,S	LinJ.35.0620	277547	702	C235R	Amino acid change	hypothetical protein, unknown function
M,S	LinJ.35.3100	1235420	471	G158C	Amino acid change	hypothetical protein, conserved
M,S	LinJ.35.3220	1295867	12	D5H	Amino acid change	protein kinase, putative
M,S	LinJ.35.3360	1342177	380	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.35.3460	1381297	2007	R670S	Amino acid change	hypothetical protein, conserved
M,S	LinJ.35.5000	1904772	1610	-	Synonymous	hypothetical protein, conserved
M,S	LinJ.35.5350	2039078	177	M60V	Amino acid change	hypothetical protein, conserved
M,S	LinJ.36.6750	2492047	1240	V414A	Amino acid change	hypothetical protein, unknown function
M,S,W T	LinJ.03.0210	56192	3	S2P	Amino acid change	hypothetical protein, conserved
M,S,W T	LinJ.03.0340	111042	1028	-	Synonymous	hypothetical protein
M,S,W T	LinJ.31.1340	537741	5894	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.02.0150	76569	1401	M468V	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase (SCGR5)
M,WT	LinJ.02.0670	311167	1444	A482V	Amino acid change	hypothetical protein, conserved

M,WT	LinJ.02.0670	311633	1910	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.04.0590	243715	1249	G417D	Amino acid change	hypothetical protein
M,WT	LinJ.04.0590	244022	942	L315V	Amino acid change	hypothetical protein
M,WT	LinJ.04.0590	244281	683	-	Synonymous	hypothetical protein
M,WT	LinJ.04.0610	251197	878	-	Synonymous	hypothetical protein
M,WT	LinJ.06.1360	519048	270	V91I	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.07.0990	425513	5334	R1779C	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.08.0760	324642	494	-	Synonymous	amastin-like protein
M,WT	LinJ.09.1460	527339	1275	N426Y	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.11.1240	515179	3182	-	Synonymous	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
M,WT	LinJ.11.1250	520210	472	-	Synonymous	ABC transporter-like protein
M,WT	LinJ.12.0666	411483	411	-	Synonymous	surface antigen protein 2, putative
M,WT	LinJ.12.0667	413742	318	T107P	Amino acid change	hypothetical protein
M,WT	LinJ.12.0690	438844	437	-	Synonymous	surface antigen protein 2 precursor
M,WT	LinJ.17.1150	497745	1055	-	Synonymous	hydrolase-like protein,esterase-like protein
M,WT	LinJ.17.1160	503985	2294	-	Synonymous	hydrolase-like protein,esterase-like protein
M,WT	LinJ.19.0380	157602	1852	A618V	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.19.0380	157724	1974	A659S	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.19.0380	159019	3269	R1090S	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.19.1680	689243	4761	P1588A	Amino acid change	hypothetical protein
M,WT	LinJ.22.0290	151890	479	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.22.0350	171577	1095	P366S	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.22.0390	186151	761	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.22.0400	189337	2149	P717L	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.22.0500	221998	1917	P640A	Amino acid change	hypothetical protein, unknown function
M,WT	LinJ.22.0660	294501	1794	T599A	Amino acid change	5%27a2rel-related protein
M,WT	LinJ.24.2150	784766	1862	-	Synonymous	transketolase
M,WT	LinJ.27.0050	15622	1376	-	Synonymous	DEAD-box helicase-like protein
M,WT	LinJ.27.0200	47949	1093	Q365L	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.27.1070	500206	284	-	Synonymous	histone H1, putative
M,WT	LinJ.27.1070	500208	282	P95A	Amino acid change	histone H1, putative

M,WT	LinJ.28.1860	679562	1526	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.28.1860	679565	1523	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.28.1870	684657	81	L28M	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.28.1880	688647	2328	H777N	Amino acid change	protein kinase, putative
M,WT	LinJ.28.3060	1096307	674	-	Synonymous	heat-shock protein hsp70, putative
M,WT	LinJ.30.1540	526507	50	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.30.2010	718072	2547	P850S	Amino acid change	hypothetical protein, unknown function
M,WT	LinJ.30.2040	727652	935	-	Synonymous	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
M,WT	LinJ.30.2040	729407	2690	-	Synonymous	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
M,WT	LinJ.30.2550	951396	281	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.30.2550	951399	278	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.30.2610	981149	544	V182E	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.30.3460	1252222	1557	V520I	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.30.3470	1254867	2	M1I	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.0460	154572	102	G35S	Amino acid change	amastin, putative
M,WT	LinJ.31.0670	231546	186	H63D	Amino acid change	mitochondrial RNA binding protein, putative
M,WT	LinJ.31.0690	239547	820	D274G	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.0690	239564	803	H268Q	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.0700	243588	2636	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.31.0700	243782	2442	A815S	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.0700	244125	2099	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.31.0700	245106	1118	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.31.0710	248174	475	P159Q	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.0720	250407	491	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.31.0720	250471	427	L143P	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.0970	359297	1245	S416P	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.0980	362656	1424	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.31.1000	368935	1864	V622A	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.1010	372927	988	I330T	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.31.1130	433609	632	-	Synonymous	N-acyl-L-amino acid amidohydrolase, putative

M,WT	LinJ.31.1230	469241	6107	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.31.3330	1463488	2402	-	Synonymous	phosphoglycan beta 1,3 galactosyltransferase 5 (SCG5)
M,WT	LinJ.32.0380	137405	2788	A930V	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.32.0460	173078	485	-	Synonymous	40S ribosomal protein S2
M,WT	LinJ.32.1100	419407	604	D202G	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.32.1520	577582	2690	D897E	Amino acid change	phosphatidylinositol 3-related kinase, putative
M,WT	LinJ.33.0280	81871	245	-	Synonymous	RGG-containing protein 2, putative,MRB1-associated protein, putative (RGG2)
M,WT	LinJ.33.3050	1242066	637	V213A	Amino acid change	hypothetical protein, unknown function
M,WT	LinJ.33.3050	1242851	1422	R475G	Amino acid change	hypothetical protein, unknown function
M,WT	LinJ.33.3050	1243423	1994	-	Synonymous	hypothetical protein, unknown function
M,WT	LinJ.34.0310	106731	1219	R407Q	Amino acid change	hypothetical protein, conserved
M,WT	LinJ.34.0310	107177	1665	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.34.0380	132238	2875	Q959R	Amino acid change	DNA-directed RNA polymerase III subunit C1, putative,DNA-directed RNA polymerase III largest subunit, putative (RPC1)
M,WT	LinJ.34.3580	1448450	416	N139K	Amino acid change	phosphomannomutase-like protein
M,WT	LinJ.35.4450	1742241	236	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.35.5000	1905747	2585	-	Synonymous	hypothetical protein, conserved
M,WT	LinJ.35.5350	2039263	362	-	Synonymous	hypothetical protein, conserved
P	LinJ.03.0010	3751	2963	-	Synonymous	hypothetical protein
P	LinJ.03.0340	113643	3629	-	Synonymous	hypothetical protein
P	LinJ.04.0560	229614	789	G264R	Amino acid change	hypothetical protein, conserved
P	LinJ.04.0560	229912	491	-	Synonymous	hypothetical protein, conserved
P	LinJ.04.0590	241515	3449	-	Synonymous	hypothetical protein
P	LinJ.04.0610	248557	3518	-	Synonymous	hypothetical protein
P	LinJ.04.0610	249594	2481	T828P	Amino acid change	hypothetical protein
P	LinJ.04.0610	250698	1377	E460K	Amino acid change	hypothetical protein
P	LinJ.04.0870	333249	2522	-	Synonymous	hypothetical protein
P	LinJ.06.0080	35209	1718	M573I	Amino acid change	ATP-binding cassette protein subfamily G, member 1, putative (ABCG1)
P	LinJ.08.0360	130024	1704	D569N	Amino acid change	hypothetical protein, conserved
P	LinJ.08.0960	410425	1040	-	Synonymous	cathepsin L-like protease

P	LinJ.09.0560	203046	913	Q305R	Amino acid change	hypothetical protein, conserved
P	LinJ.09.1371	505610	425	-	Synonymous	hypothetical protein
P	LinJ.09.1450	525003	134	-	Synonymous	hypothetical protein, conserved
P	LinJ.09.1460	526782	1832	-	Synonymous	hypothetical protein, conserved
P	LinJ.09.1460	527355	1259	-	Synonymous	hypothetical protein, conserved
P	LinJ.09.1480	534250	212	-	Synonymous	hypothetical protein, conserved
P	LinJ.10.0260	101655	1918	G640D	Amino acid change	hypothetical protein, conserved
P	LinJ.10.0260	99910	173	-	Synonymous	hypothetical protein, conserved
P	LinJ.10.0510	213196	242	-	Synonymous	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
P	LinJ.10.0510	213214	260	-	Synonymous	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
P	LinJ.10.0510	213366	412	T138I	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
P	LinJ.10.0520	216509	424	A142V	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
P	LinJ.10.0521	220205	160	A54D	Amino acid change	hypothetical protein, unknown function
P	LinJ.11.0040	12518	258	K87*	STOP	ATP-binding cassette protein subfamily H, member 1, putative (ABCH1)
P	LinJ.11.1210	490566	894	T299A	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
P	LinJ.11.1210	490811	1139	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
P	LinJ.11.1220	499290	1799	-	Synonymous	ABC transporter-like protein
P	LinJ.11.1240	513856	1859	-	Synonymous	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
P	LinJ.11.1240	513873	1876	V626A	Amino acid change	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
P	LinJ.12.0330	174295	3545	-	Synonymous	pumillio protein 4, putative (PUF4)
P	LinJ.12.0663	396204	1787	-	Synonymous	surface antigen protein 2, putative
P	LinJ.12.0666	411669	597	S200P	Amino acid change	surface antigen protein 2, putative
P	LinJ.12.0666	411672	600	E201Q	Amino acid change	surface antigen protein 2, putative
P	LinJ.12.0666	411777	705	Q236K	Amino acid change	surface antigen protein 2, putative
P	LinJ.12.0667	413617	193	R65L	Amino acid change	hypothetical protein

P	LinJ.12.0671	431769	158	-	Synonymous	surface antigen protein, putative
P	LinJ.12.0690	439293	886	D296G	Amino acid change	surface antigen protein 2 precursor
P	LinJ.12.0830	530882	2800	R934Q	Amino acid change	puromycin-sensitive aminopeptidase-like protein, metallo-peptidase, Clan MA(E), Family M1
P	LinJ.13.0080	19825	1178	-	Synonymous	mitochondrial DNA polymerase I protein B, putative (POLIB)
P	LinJ.13.0740	269480	387	A130T	Amino acid change	hypothetical protein, conserved
P	LinJ.14.0950	368817	1244	-	Synonymous	hypothetical protein, conserved
P	LinJ.14.1180	483521	6236	-	Synonymous	kinesin K39, putative
P	LinJ.14.1190	492032	3122	-	Synonymous	kinesin K39, putative
P	LinJ.15.0660	248683	2123	-	Synonymous	hypothetical protein, unknown function
P	LinJ.16.0210	74756	126	T43A	Amino acid change	mitochondrial ornithine carrier protein-like protein
P	LinJ.17.0140	56778	2639	E880D	Amino acid change	receptor-type adenylate cyclase b (RAC-B2)
P	LinJ.17.1150	497835	1145	-	Synonymous	hydrolase-like protein, esterase-like protein
P	LinJ.19.0030	8210	29	-	Synonymous	histone H2B
P	LinJ.19.0380	156527	777	R260C	Amino acid change	hypothetical protein, conserved
P	LinJ.19.0380	158710	2960	-	Synonymous	hypothetical protein, conserved
P	LinJ.19.0380	160596	4846	A1616G	Amino acid change	hypothetical protein, conserved
P	LinJ.19.0380	161459	5709	A1904S	Amino acid change	hypothetical protein, conserved
P	LinJ.19.0430	170360	499	V167G	Amino acid change	hypothetical protein, conserved
P	LinJ.19.0860	356721	103	L35P	Amino acid change	ATG8%2FAUT7%2FAPG8%2FPAZ2, putative (ATG8B.3)
P	LinJ.19.1680	687595	3113	-	Synonymous	hypothetical protein
P	LinJ.22.0400	189886	1600	A534G	Amino acid change	hypothetical protein, conserved
P	LinJ.22.0400	190001	1485	A496T	Amino acid change	hypothetical protein, conserved
P	LinJ.22.0400	190151	1335	R446S	Amino acid change	hypothetical protein, conserved
P	LinJ.22.0500	223120	795	G266R	Amino acid change	hypothetical protein, unknown function
P	LinJ.22.0500	223129	786	G263S	Amino acid change	hypothetical protein, unknown function
P	LinJ.22.0660	295308	2601	L868I	Amino acid change	5%27a2rel-related protein
P	LinJ.22.0660	297224	4517	Q1506H	Amino acid change	5%27a2rel-related protein
P	LinJ.24.0440	155559	3124	Q1042R	Amino acid change	hypothetical predicted transmembrane protein
P	LinJ.24.0440	155581	3146	-	Synonymous	hypothetical predicted transmembrane protein
P	LinJ.24.1160	413479	2267	-	Synonymous	actin-interacting protein-like protein
P	LinJ.24.1640	614062	1739	-	Synonymous	hypothetical protein, conserved

P	LinJ.24.1970	739493	177	V60I	Amino acid change	hypothetical protein, conserved
P	LinJ.24.2230	807060	354	Y119H	Amino acid change	hypothetical protein, conserved
P	LinJ.24.2240	812489	199	G67D	Amino acid change	hypothetical protein, unknown function
P	LinJ.24.2260	820222	1208	-	Synonymous	hypothetical protein, conserved
P	LinJ.24.2260	820263	1167	V390L	Amino acid change	hypothetical protein, conserved
P	LinJ.24.2260	821368	62	-	Synonymous	hypothetical protein, conserved
P	LinJ.25.0490	147501	2042	-	Synonymous	hypothetical protein, conserved
P	LinJ.25.2560	878515	146	-	Synonymous	histone H4
P	LinJ.27.0010	5894	38	-	Synonymous	hypothetical protein, conserved
P	LinJ.27.0020	7459	2648	-	Synonymous	hypothetical protein, conserved
P	LinJ.27.0020	7471	2636	H879Q	Amino acid change	hypothetical protein, conserved
P	LinJ.27.0090	23831	470	-	Synonymous	cytochrome p450-like protein
P	LinJ.27.0090	24071	230	-	Synonymous	cytochrome p450-like protein
P	LinJ.27.0120	31655	986	-	Synonymous	hypothetical protein, conserved
P	LinJ.27.0120	31678	963	F322L	Amino acid change	hypothetical protein, conserved
P	LinJ.27.0120	31739	902	-	Synonymous	hypothetical protein, conserved
P	LinJ.27.0120	32444	197	-	Synonymous	hypothetical protein, conserved
P	LinJ.27.0170	42978	1036	V346A	Amino acid change	hypothetical protein, conserved
P	LinJ.27.0190	47104	56	-	Synonymous	proteasome alpha 7 subunit, putative
P	LinJ.27.0420	117760	1028	I343M	Amino acid change	heat shock protein DNAJ, putative
P	LinJ.27.1940	860667	1295	-	Synonymous	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	860679	1283	-	Synonymous	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	860744	1218	I407V	Amino acid change	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	860746	1216	V406G	Amino acid change	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	860750	1212	-	Synonymous	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	860916	1046	-	Synonymous	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	860918	1044	H349Y	Amino acid change	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	860922	1040	-	Synonymous	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	861387	575	-	Synonymous	D-lactate dehydrogenase-like protein
P	LinJ.27.1940	861918	44	F15L	Amino acid change	D-lactate dehydrogenase-like protein
P	LinJ.27.1950	865119	574	R192H	Amino acid change	branched-chain amino acid aminotransferase, putative
P	LinJ.27.2350	1005214	750	A251P	Amino acid change	heat shock protein DNAJ, putative



P	LinJ.28.0350	112467	163	S55L	Amino acid change	hypothetical protein, conserved
P	LinJ.28.1170	406121	668	-	Synonymous	hypothetical protein, conserved
P	LinJ.28.1360	479785	532	G178D	Amino acid change	hypothetical protein, conserved
P	LinJ.28.1360	479863	610	C204S	Amino acid change	hypothetical protein, conserved
P	LinJ.28.1480	517227	366	V123I	Amino acid change	haloacid dehalogenase-like hydrolase, putative
P	LinJ.28.1490	519534	125	-	Synonymous	haloacid dehalogenase-like hydrolase-like protein
P	LinJ.28.1740	615929	735	T246S	Amino acid change	hypothetical protein, conserved
P	LinJ.28.1800	645992	2136	E713K	Amino acid change	differentiation inhibitory kinase, putative (ZFK)
P	LinJ.28.1880	687259	3716	-	Synonymous	protein kinase, putative
P	LinJ.29.1340	499933	4079	-	Synonymous	hypothetical protein, unknown function
P	LinJ.29.1460	577107	2113	T705I	Amino acid change	RNA binding protein, putative
P	LinJ.29.1560	672075	1334	-	Synonymous	hypothetical protein, conserved
P	LinJ.29.1560	672996	413	-	Synonymous	hypothetical protein, conserved
P	LinJ.29.1560	673009	400	V134A	Amino acid change	hypothetical protein, conserved
P	LinJ.29.1560	673028	381	L128V	Amino acid change	hypothetical protein, conserved
P	LinJ.29.1560	673033	376	A126V	Amino acid change	hypothetical protein, conserved
P	LinJ.29.1560	673083	326	-	Synonymous	hypothetical protein, conserved
P	LinJ.29.1760	755515	6467	-	Synonymous	hypothetical protein, conserved
P	LinJ.29.1770	765776	624	F209L	Amino acid change	Zn-finger domain protein, putative
P	LinJ.29.1770	766179	221	-	Synonymous	Zn-finger domain protein, putative
P	LinJ.29.1770	766219	181	F61S	Amino acid change	Zn-finger domain protein, putative
P	LinJ.29.2110	876433	1432	R478L	Amino acid change	hypothetical protein, conserved
P	LinJ.29.2280	965312	1274	-	Synonymous	hypothetical protein, conserved
P	LinJ.29.2320	985225	1354	A452E	Amino acid change	hypothetical protein, conserved
P	LinJ.29.2770	1150087	6	A3T	Amino acid change	helicase, putative
P	LinJ.29.3020	194778	352	R118L	Amino acid change	tuzin like protein, putative (pseudogene)
P	LinJ.29.3030	198413	758	E253D	Amino acid change	amastin, putative
P	LinJ.29.3030	198416	755	-	Synonymous	amastin, putative
P	LinJ.29.3030	198518	653	-	Synonymous	amastin, putative
P	LinJ.29.3030	198863	308	-	Synonymous	amastin, putative
P	LinJ.29.3030	198865	306	R103S	Amino acid change	amastin, putative
P	LinJ.29.3030	199056	115	A39G	Amino acid change	amastin, putative

P	LinJ.30.0330	106382	369	R124S	Amino acid change	hypothetical protein, conserved
P	LinJ.30.0330	106430	321	C108G	Amino acid change	hypothetical protein, conserved
P	LinJ.30.1300	420412	227	-	Synonymous	calcium-binding protein, putative
P	LinJ.30.1520	521931	515	K172N	Amino acid change	p1%2Fs1 nuclease
P	LinJ.30.1900	677797	1036	G346D	Amino acid change	hypothetical protein, unknown function
P	LinJ.30.2040	729047	2330	-	Synonymous	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
P	LinJ.30.2130	759833	938	-	Synonymous	hypothetical protein, conserved
P	LinJ.30.2150	768951	240	Y81H	Amino acid change	hypothetical protein, conserved
P	LinJ.30.2200	795940	1384	V462A	Amino acid change	RNA-binding protein, putative
P	LinJ.30.2550	949078	2599	V867A	Amino acid change	hypothetical protein, conserved
P	LinJ.30.2580	970881	685	A229D	Amino acid change	hypothetical protein, conserved
P	LinJ.30.2590	974625	1282	Q428R	Amino acid change	formate--tetrahydrofolate ligase (FTHS)
P	LinJ.30.3110	1119154	722	-	Synonymous	hypothetical protein, conserved
P	LinJ.30.3460	1251011	346	A116V	Amino acid change	hypothetical protein, conserved
P	LinJ.30.3470	1256229	1364	-	Synonymous	hypothetical protein, conserved
P	LinJ.30.3500	1270667	281	-	Synonymous	hypothetical protein, conserved
P	LinJ.30.3640	1309643	543	Q182E	Amino acid change	serine%2Fthreonine-protein kinase, putative,protein kinase, putative
P	LinJ.30.3700	1326434	152	-	Synonymous	hypothetical protein, conserved
P	LinJ.30.3700	1327292	1010	-	Synonymous	hypothetical protein, conserved
P	LinJ.31.0430	136795	2208	L737F	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
P	LinJ.31.0460	154472	202	N68S	Amino acid change	amastin, putative
P	LinJ.31.0690	239627	740	-	Synonymous	hypothetical protein, conserved
P	LinJ.31.0750	267310	741	V248F	Amino acid change	hypothetical protein, conserved
P	LinJ.31.0750	267719	332	-	Synonymous	hypothetical protein, conserved
P	LinJ.31.0790	280916	577	M193T	Amino acid change	hypothetical protein, unknown function
P	LinJ.31.0950	349520	1861	E621G	Amino acid change	sodium stibogluconate resistance protein, putative
P	LinJ.31.0950	349749	1632	A545S	Amino acid change	sodium stibogluconate resistance protein, putative
P	LinJ.31.0950	350009	1372	G458E	Amino acid change	sodium stibogluconate resistance protein, putative
P	LinJ.31.0970	359906	636	S213P	Amino acid change	hypothetical protein, conserved

P	LinJ.31.1030	391458	434	-	Synonymous	hypothetical protein, conserved
P	LinJ.31.1130	433363	878	M293I	Amino acid change	N-acyl-L-amino acid amidohydrolase, putative
P	LinJ.31.1130	433828	413	-	Synonymous	N-acyl-L-amino acid amidohydrolase, putative
P	LinJ.31.1230	460670	14678	-	Synonymous	hypothetical protein, conserved
P	LinJ.31.1230	461941	13407	S4470A	Amino acid change	hypothetical protein, conserved
P	LinJ.31.1230	468475	6873	G2292S	Amino acid change	hypothetical protein, conserved
P	LinJ.31.1230	470242	5106	P1703T	Amino acid change	hypothetical protein, conserved
P	LinJ.31.1270	497732	9	P4S	Amino acid change	hypothetical protein, conserved
P	LinJ.31.1290	505697	2623	E875A	Amino acid change	p-glycoprotein e (ABCC4)
P	LinJ.31.1290	505698	2622	E875K	Amino acid change	p-glycoprotein e (ABCC4)
P	LinJ.31.1300	510804	4100	E1367D	Amino acid change	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
P	LinJ.31.1300	510898	4006	R1336H	Amino acid change	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
P	LinJ.31.1300	512707	2197	E733A	Amino acid change	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
P	LinJ.31.1300	512708	2196	E733K	Amino acid change	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
P	LinJ.31.1300	512717	2187	A730P	Amino acid change	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
P	LinJ.31.1300	513573	1331	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
P	LinJ.31.1330	530302	3327	H1110N	Amino acid change	hypothetical protein, conserved
P	LinJ.31.1340	538905	4730	-	Synonymous	hypothetical protein, conserved
P	LinJ.31.1470	656361	761	N254K	Amino acid change	hypothetical protein, unknown function
P	LinJ.31.1850	845590	1634	-	Synonymous	amino acid permease (AAT8.3)
P	LinJ.31.1860	852618	1391	D464E	Amino acid change	amino acid permease (AAT8.4)
P	LinJ.31.2290	1093298	4681	P1561Q	Amino acid change	hypothetical protein, unknown function
P	LinJ.31.2540	1211251	30	G11C	Amino acid change	lipase, putative
P	LinJ.31.3400	27481	1702	T568K	Amino acid change	sodium stibogluconate resistance protein, putative
P	LinJ.31.3400	27547	1636	P546H	Amino acid change	sodium stibogluconate resistance protein, putative
P	LinJ.32.0570	197078	356	-	Synonymous	hypothetical protein, conserved
P	LinJ.32.0600	205308	383	-	Synonymous	ATP-dependent RNA helicase-like protein, putative,RNA

						helicase, putative
P	LinJ.32.0630	214139	1800	V601I	Amino acid change	hypothetical protein, conserved
P	LinJ.32.0640	216854	944	-	Synonymous	hypothetical protein, conserved
P	LinJ.32.1050	404015	1649	-	Synonymous	hypothetical protein, conserved
P	LinJ.32.1050	404859	2493	G832R	Amino acid change	hypothetical protein, conserved
P	LinJ.32.1110	422723	293	-	Synonymous	vacuolar sorting-like protein
P	LinJ.32.1520	575991	4281	T1428A	Amino acid change	phosphatidylinositol 3-related kinase, putative
P	LinJ.32.3350	1245005	3306	A1103T	Amino acid change	hypothetical protein, conserved
P	LinJ.33.3050	1246112	4683	E1562K	Amino acid change	hypothetical protein, unknown function
P	LinJ.34.0100	34206	827	-	Synonymous	hypothetical protein, conserved
P	LinJ.34.0310	106091	579	T194A	Amino acid change	hypothetical protein, conserved
P	LinJ.34.0380	129674	311	-	Synonymous	DNA-directed RNA polymerase III subunit C1, putative,DNA-directed RNA polymerase III largest subunit, putative (RPC1)
P	LinJ.34.0470	155878	916	S306C	Amino acid change	hypothetical protein, unknown function
P	LinJ.34.0480	160435	888	F297I	Amino acid change	hypothetical protein, unknown function
P	LinJ.34.0480	162141	2594	-	Synonymous	hypothetical protein, unknown function
P	LinJ.34.0480	162768	3221	-	Synonymous	hypothetical protein, unknown function
P	LinJ.34.0480	163676	4129	T1377I	Amino acid change	hypothetical protein, unknown function
P	LinJ.34.0530	202385	1054	V352A	Amino acid change	phosphoglycan beta 1,2 arabinosyltransferase, (SCA like) (SCAL)
P	LinJ.34.1430	591624	1760	-	Synonymous	hypothetical protein, conserved
P	LinJ.34.1700	715060	366	V123I	Amino acid change	amastin-like surface protein, putative
P	LinJ.34.1730	727396	285	T96A	Amino acid change	amastin-like surface protein, putative
P	LinJ.34.2360	1003541	1832	-	Synonymous	hypothetical protein, unknown function
P	LinJ.34.4140	1634369	2642	-	Synonymous	coatomer alpha subunit, putative
P	LinJ.34.4340	61795	288	F97V	Amino acid change	amastin-like surface protein, putative
P	LinJ.35.0280	69229	12	T5A	Amino acid change	hypothetical protein, unknown function
P	LinJ.35.0610	274932	6435	R2146C	Amino acid change	hypothetical protein, conserved
P	LinJ.35.3360	1342018	539	-	Synonymous	hypothetical protein, conserved
P	LinJ.35.3370	1344128	242	-	Synonymous	transport protein particle (TRAPP) subunit, putative
P	LinJ.35.4050	1583219	3156	A1053T	Amino acid change	protein kinase, putative,MAP kinase kinase-like protein
P	LinJ.35.4450	1742955	950	-	Synonymous	hypothetical protein, conserved

P	LinJ.35.5000	1905057	1895	E632D	Amino acid change	hypothetical protein, conserved
P	LinJ.36.5490	2026872	2474	-	Synonymous	adaptin, putative
P	LinJ.36.6770	2502056	1910	-	Synonymous	histidine secretory acid phosphatase, putative
P,S	LinJ.02.0710	323670	1073	-	Synonymous	dipeptylcarboxypeptidase (DCP)
P,S	LinJ.04.0590	243190	1774	V592A	Amino acid change	hypothetical protein
P,S	LinJ.04.0610	250060	2015	-	Synonymous	hypothetical protein
P,S	LinJ.04.0860	328573	138	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.04.0870	333858	1913	-	Synonymous	hypothetical protein
P,S	LinJ.06.1360	520521	1743	P582A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.07.0990	424434	4255	G1419D	Amino acid change	hypothetical protein, conserved
P,S	LinJ.09.1430	517976	490	-	Synonymous	hypothetical protein, unknown function
P,S	LinJ.09.1460	527598	1016	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.10.0521	220509	464	-	Synonymous	hypothetical protein, unknown function
P,S	LinJ.11.1210	489915	243	E82Q	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
P,S	LinJ.12.0663	396335	1918	V640A	Amino acid change	surface antigen protein 2, putative
P,S	LinJ.12.0690	439075	668	-	Synonymous	surface antigen protein 2 precursor
P,S	LinJ.12.0690	439112	705	Q236K	Amino acid change	surface antigen protein 2 precursor
P,S	LinJ.13.0880	316759	23	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.14.0370	120126	1743	T582A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.16.1760	691187	5565	Y1856H	Amino acid change	hypothetical protein, conserved
P,S	LinJ.17.1170	507242	1103	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.17.1180	511762	1785	-	Synonymous	hypothetical protein, unknown function
P,S	LinJ.17.1180	512092	2115	C706R	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.17.1180	512137	2160	L721V	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.19.0360	140459	3854	-	Synonymous	protein kinase, putative
P,S	LinJ.19.0380	157614	1864	P622L	Amino acid change	hypothetical protein, conserved
P,S	LinJ.19.0380	157678	1928	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.19.1690	717497	4891	S1631W	Amino acid change	hypothetical protein
P,S	LinJ.22.0290	152190	179	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.22.0420	195018	2305	V769A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.22.0420	196204	1119	F374L	Amino acid change	hypothetical protein, conserved

P,S	LinJ.22.0500	220980	2935	H979R	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.22.0660	297200	4493	-	Synonymous	5%27a2rel-related protein
P,S	LinJ.22.0680	305582	1562	-	Synonymous	3%27a2rel-related protein
P,S	LinJ.22.0750	332454	1498	G500D	Amino acid change	hypothetical protein, conserved
P,S	LinJ.23.0290	96435	2332	G778E	Amino acid change	ABC-thiol transporter,P-glycoprotein A (PGPA) (MRPA)
P,S	LinJ.24.0460	162766	1364	-	Synonymous	hypothetical predicted transmembrane protein
P,S	LinJ.24.2190	793846	329	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.24.2260	819106	2324	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.24.2260	820162	1268	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.25.2570	881071	490	E164G	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 6 (SCG6)
P,S	LinJ.25.2570	881080	499	A167V	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 6 (SCG6)
P,S	LinJ.26.0500	137065	2228	-	Synonymous	hypothetical protein, conserved (pseudogene)
P,S	LinJ.27.0040	13361	605	-	Synonymous	CAAX prenyl protease 1, putative,metallo-peptidase, Clan M-, Family M48
P,S	LinJ.27.0200	47959	1083	T362A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.27.0400	113875	1933	P645L	Amino acid change	hypothetical protein, conserved
P,S	LinJ.28.1360	479817	564	S189P	Amino acid change	hypothetical protein, conserved
P,S	LinJ.28.1490	520466	1057	G353E	Amino acid change	haloacid dehalogenase-like hydrolase-like protein
P,S	LinJ.28.1860	680649	439	L147S	Amino acid change	hypothetical protein, conserved
P,S	LinJ.28.1880	688212	2763	S922G	Amino acid change	protein kinase, putative
P,S	LinJ.28.1880	690055	920	N307K	Amino acid change	protein kinase, putative
P,S	LinJ.29.1340	497012	1158	P387S	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.29.1340	497548	1694	-	Synonymous	hypothetical protein, unknown function
P,S	LinJ.29.1340	497552	1698	S567T	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.29.1340	497933	2079	S694A	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.29.1340	497949	2095	C699F	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.29.1340	499829	3975	S1326P	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.29.1340	499847	3993	V1332I	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.29.1340	500118	4264	G1422D	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.29.1460	575776	782	-	Synonymous	RNA binding protein, putative
P,S	LinJ.29.1460	576840	1846	C616Y	Amino acid change	RNA binding protein, putative
P,S	LinJ.29.1460	577167	2173	T725M	Amino acid change	RNA binding protein, putative

P,S	LinJ.29.1460	577168	2174	-	Synonymous	RNA binding protein, putative
P,S	LinJ.29.1560	671736	1673	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1560	672383	1026	S343P	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1560	672423	986	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1560	672848	561	T188A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1560	673306	103	V35A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1570	677430	497	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1580	679826	160	L54R	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1580	679841	145	V49A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1730	748987	158	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1760	757211	4771	P1591L	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1760	758728	3254	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1760	759103	2879	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1760	759114	2868	A957T	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1760	759670	2312	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1760	761753	229	P77L	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1770	765036	1364	-	Synonymous	Zn-finger domain protein, putative
P,S	LinJ.29.1770	765184	1216	T406M	Amino acid change	Zn-finger domain protein, putative
P,S	LinJ.29.1770	765280	1120	P374R	Amino acid change	Zn-finger domain protein, putative
P,S	LinJ.29.1770	765406	994	L332P	Amino acid change	Zn-finger domain protein, putative
P,S	LinJ.29.1770	765414	986	-	Synonymous	Zn-finger domain protein, putative
P,S	LinJ.29.1770	765433	967	G323V	Amino acid change	Zn-finger domain protein, putative
P,S	LinJ.29.1980	832517	1361	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1980	833100	778	S260N	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1980	833116	762	S255P	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1980	833280	598	E200G	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.1990	836259	161	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.1990	836320	100	A34V	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.2100	869951	4475	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.2100	870032	4394	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.2100	870040	4386	P1463S	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.2100	870161	4265	-	Synonymous	hypothetical protein, conserved

P,S	LinJ.29.2100	871256	3170	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.2160	895798	2825	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.2280	966508	78	S27P	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.2290	967696	1388	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.2320	985158	1421	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.29.2720	1132019	562	V188G	Amino acid change	hypothetical protein, conserved
P,S	LinJ.29.2770	1152776	2695	T899M	Amino acid change	helicase, putative
P,S	LinJ.29.3030	198994	177	V60F	Amino acid change	amastin, putative
P,S	LinJ.29.3030	199005	166	S56Y	Amino acid change	amastin, putative
P,S	LinJ.29.3030	199034	137	-	Synonymous	amastin, putative
P,S	LinJ.30.0330	106108	643	R215L	Amino acid change	hypothetical protein, conserved
P,S	LinJ.30.1510	515337	1492	H498R	Amino acid change	kinesin, putative
P,S	LinJ.30.1510	515497	1652	-	Synonymous	kinesin, putative
P,S	LinJ.30.1540	528929	2472	P825S	Amino acid change	hypothetical protein, conserved
P,S	LinJ.30.1890	672191	274	M92T	Amino acid change	hypothetical protein, conserved
P,S	LinJ.30.1900	677296	535	S179C	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.30.1970	702149	424	M142T	Amino acid change	hypothetical protein, conserved
P,S	LinJ.30.2010	718564	3039	R1014W	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.30.2040	728130	1413	I472V	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
P,S	LinJ.30.2040	728135	1418	L473F	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
P,S	LinJ.30.2580	970559	1007	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.30.2590	974548	1359	-	Synonymous	formate--tetrahydrofolate ligase (FTHS)
P,S	LinJ.30.2600	977809	239	-	Synonymous	RNA-binding protein, putative
P,S	LinJ.30.2610	979876	1817	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.30.2610	980008	1685	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.30.2610	980640	1053	R352S	Amino acid change	hypothetical protein, conserved
P,S	LinJ.30.2670	993079	533	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.30.3120	1122552	174	E59K	Amino acid change	homoserine kinase, putative
P,S	LinJ.31.0970	358344	2198	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.31.1000	367445	3354	L1119F	Amino acid change	hypothetical protein, conserved



P,S	LinJ.31.1000	367446	3353	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.31.1000	368358	2441	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.31.1000	368598	2201	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.31.1130	433513	728	-	Synonymous	N-acyl-L-amino acid amidohydrolase, putative
P,S	LinJ.31.1230	465200	10148	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.31.1230	470231	5117	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.31.1230	471436	3912	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.31.1300	511814	3090	D1031N	Amino acid change	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
P,S	LinJ.31.1320	525447	1372	V458A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.31.1490	673521	689	-	Synonymous	surface membrane protein gp46-like protein
P,S	LinJ.32.0430	165500	1928	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.32.0450	171609	23	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.32.0480	177848	2284	A762G	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.0510	184395	891	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.32.0570	197540	818	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.32.0610	208382	666	S223P	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.0610	209064	1348	V450A	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.0630	214684	2345	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.32.0990	361921	2880	S961T	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.1050	402833	467	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.32.1050	402870	504	S169R	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.1050	402911	545	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.32.1050	403078	712	V238G	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.1050	403391	1025	E342D	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.1050	404947	2581	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.32.1100	420481	1678	A560V	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.1100	420504	1701	C568R	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.1120	425646	1056	I353V	Amino acid change	dynein, putative
P,S	LinJ.32.1500	568159	315	A106T	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.1520	577339	2933	-	Synonymous	phosphatidylinositol 3-related kinase, putative
P,S	LinJ.32.1530	582275	755	-	Synonymous	hypothetical protein, conserved

P,S	LinJ.32.1530	582807	223	Y75F	Amino acid change	hypothetical protein, conserved
P,S	LinJ.32.1740	655459	1062	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.33.3050	1241725	296	F99L	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.33.3050	1246401	4972	R1658Q	Amino acid change	hypothetical protein, unknown function
P,S	LinJ.33.3230	1377935	3170	Q1057H	Amino acid change	hypothetical protein, conserved
P,S	LinJ.35.0530	218542	780	E261K	Amino acid change	proteophosphoglycan 5
P,S	LinJ.35.0610	274947	6450	P2151S	Amino acid change	hypothetical protein, conserved
P,S	LinJ.35.4180	1624208	1909	A637V	Amino acid change	hypothetical protein, conserved
P,S	LinJ.35.5000	1904857	1695	G566S	Amino acid change	hypothetical protein, conserved
P,S	LinJ.35.5020	1912381	473	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.35.5350	2039128	227	-	Synonymous	hypothetical protein, conserved
P,S	LinJ.36.4730	1734093	248	-	Synonymous	60S ribosomal protein L18, putative (RPL18)
P,S	LinJ.36.6770	2503360	606	Y203D	Amino acid change	histidine secretory acid phosphatase, putative
P,S,WT	LinJ.22.0290	151611	758	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.04.0610	250264	1811	-	Synonymous	hypothetical protein
P,WT	LinJ.04.0870	334063	1708	S570N	Amino acid change	hypothetical protein
P,WT	LinJ.04.0870	335445	326	-	Synonymous	hypothetical protein
P,WT	LinJ.06.0410	139949	656	-	Synonymous	60S ribosomal protein L19, putative
P,WT	LinJ.08.0960	410675	790	A264G	Amino acid change	cathepsin L-like protease
P,WT	LinJ.08.1250	481055	534	C179G	Amino acid change	protein kinase, putative
P,WT	LinJ.09.1371	505630	405	E136K	Amino acid change	hypothetical protein
P,WT	LinJ.09.1371	505798	237	A80S	Amino acid change	hypothetical protein
P,WT	LinJ.09.1450	524026	1111	L371P	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.09.1450	524390	747	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.09.1470	530057	938	-	Synonymous	hypothetical protein, unknown function
P,WT	LinJ.10.0510	213182	228	P77S	Amino acid change	GP63, leishmanolysin, metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
P,WT	LinJ.11.1210	489988	316	V106A	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
P,WT	LinJ.11.1210	490339	667	R223H	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
P,WT	LinJ.11.1210	490340	668	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative

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P,WT	LinJ.11.1210	490346	674	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
P,WT	LinJ.11.1250	520276	538	-	Synonymous	ABC transporter-like protein
P,WT	LinJ.13.1630	635536	1021	R341H	Amino acid change	phosphoprotein phosphatase-like protein
P,WT	LinJ.14.0370	120104	1721	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.14.1190	496621	7711	K2571R	Amino acid change	kinesin K39, putative
P,WT	LinJ.19.0240	77863	79	P27L	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.19.0380	160837	5087	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.21.1770	614419	1459	G487E	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.22.0260	136073	2919	G974R	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.22.0400	191408	78	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.22.0500	222092	1823	-	Synonymous	hypothetical protein, unknown function
P,WT	LinJ.22.0500	223003	912	R305G	Amino acid change	hypothetical protein, unknown function
P,WT	LinJ.22.0660	297231	4524	Q1509E	Amino acid change	5%27a2rel-related protein
P,WT	LinJ.24.1970	738257	1413	A472S	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.24.1970	738465	1205	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.24.1970	738467	1203	S402G	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.24.2100	774238	1625	-	Synonymous	tubulin folding cofactor D, putative
P,WT	LinJ.24.2250	816182	818	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.24.2270	824519	1956	E653K	Amino acid change	basal body component, putative,ML protein
P,WT	LinJ.25.1030	375640	723	T242A	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.25.1030	375850	933	A312S	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.27.0120	32617	24	P9S	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.27.0160	40353	632	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.27.0190	47001	159	Y54H	Amino acid change	proteasome alpha 7 subunit, putative
P,WT	LinJ.27.0320	84090	3152	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.28.1320	469590	2292	A765T	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.28.1730	611218	3319	M1107T	Amino acid change	helicase-like protein
P,WT	LinJ.28.1730	613158	1379	-	Synonymous	helicase-like protein
P,WT	LinJ.28.1730	614314	223	T75I	Amino acid change	helicase-like protein
P,WT	LinJ.28.1830	669041	1197	S400R	Amino acid change	hypothetical protein, conserved

P,WT	LinJ.28.1870	684499	239	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.28.1880	689345	1630	V544A	Amino acid change	protein kinase, putative
P,WT	LinJ.29.3000	189769	333	L112V	Amino acid change	amastin, putative
P,WT	LinJ.30.1510	515309	1464	Q489K	Amino acid change	kinesin, putative
P,WT	LinJ.30.1510	517060	3215	-	Synonymous	kinesin, putative
P,WT	LinJ.30.1900	677813	1052	-	Synonymous	hypothetical protein, unknown function
P,WT	LinJ.30.1900	678415	1654	P552L	Amino acid change	hypothetical protein, unknown function
P,WT	LinJ.30.2010	716508	983	-	Synonymous	hypothetical protein, unknown function
P,WT	LinJ.30.2010	717685	2160	E721K	Amino acid change	hypothetical protein, unknown function
P,WT	LinJ.30.2020	720421	148	S50W	Amino acid change	hypothetical protein, unknown function
P,WT	LinJ.30.2150	768647	544	R182Q	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.30.2580	970502	1064	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.30.2580	970517	1049	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.30.2630	986267	356	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.30.2970	1075632	845	-	Synonymous	phospholipase c-like protein
P,WT	LinJ.30.3470	1255561	696	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.30.3640	1309759	659	-	Synonymous	serine%2Fthreonine-protein kinase, putative,protein kinase, putative
P,WT	LinJ.31.0670	229644	2088	A697S	Amino acid change	mitochondrial RNA binding protein, putative
P,WT	LinJ.31.0690	235863	4504	G1502D	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.31.0690	239963	404	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.31.0700	245045	1179	F394L	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.31.0710	248094	555	A186T	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.31.0950	350045	1336	G446V	Amino acid change	sodium stibogluconate resistance protein, putative
P,WT	LinJ.31.0960	357119	164	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.31.0980	362166	1914	T639A	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.31.1030	391392	500	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.31.1130	433720	521	-	Synonymous	N-acyl-L-amino acid amidohydrolase, putative
P,WT	LinJ.31.1230	471130	4218	Y1407H	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.31.1240	482410	201	-	Synonymous	vacuolar-type proton translocating pyrophosphatase 1, putative
P,WT	LinJ.31.1300	511323	3581	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative

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P,WT	LinJ.31.1320	524713	2106	L703I	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.31.1320	524857	1962	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.31.1320	526062	757	E253A	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.31.1320	526811	8	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.32.2370	867461	1312	A438V	Amino acid change	hypothetical protein, unknown function
P,WT	LinJ.33.3050	1244778	3349	K1117T	Amino acid change	hypothetical protein, unknown function
P,WT	LinJ.33.3050	1245671	4242	R1415C	Amino acid change	hypothetical protein, unknown function
P,WT	LinJ.34.0500	179553	1367	N456K	Amino acid change	calcium channel protein, putative,ion transporter, putative
P,WT	LinJ.34.4340	62017	510	-	Synonymous	amastin-like surface protein, putative
P,WT	LinJ.35.3700	1463483	2015	H672Q	Amino acid change	hypothetical protein, conserved
P,WT	LinJ.35.5020	1912273	365	-	Synonymous	hypothetical protein, conserved
P,WT	LinJ.36.3330	1264561	545	-	Synonymous	receptor-type adenylate cyclase a-like protein
P,WT	LinJ.36.6750	2493276	11	-	Synonymous	hypothetical protein, unknown function
P,WT	LinJ.36.6770	2502060	1906	H636R	Amino acid change	histidine secretory acid phosphatase, putative
S	LinJ.02.0670	311039	1316	-	Synonymous	hypothetical protein, conserved
S	LinJ.02.0720	328108	1228	Q410R	Amino acid change	hypothetical protein
S	LinJ.04.0590	243652	1312	W438L	Amino acid change	hypothetical protein
S	LinJ.04.0610	251759	316	V106A	Amino acid change	hypothetical protein
S	LinJ.04.0610	251825	250	N84I	Amino acid change	hypothetical protein
S	LinJ.04.0870	333835	1936	A646V	Amino acid change	hypothetical protein
S	LinJ.05.0170	52390	1399	G467D	Amino acid change	hypothetical protein, conserved
S	LinJ.05.0670	225312	471	D158N	Amino acid change	hypothetical protein, conserved
S	LinJ.05.0670	225598	757	V253A	Amino acid change	hypothetical protein, conserved
S	LinJ.05.0670	226882	2041	Y681S	Amino acid change	hypothetical protein, conserved
S	LinJ.05.0670	226973	2132	-	Synonymous	hypothetical protein, conserved
S	LinJ.05.0670	227176	2335	A779V	Amino acid change	hypothetical protein, conserved
S	LinJ.05.0670	227400	2559	K854E	Amino acid change	hypothetical protein, conserved
S	LinJ.05.0670	227413	2572	L858R	Amino acid change	hypothetical protein, conserved
S	LinJ.07.1080	487238	506	E169D	Amino acid change	hypothetical protein, conserved
S	LinJ.08.0300	103396	356	-	Synonymous	iron superoxide dismutase (FESODA)
S	LinJ.08.0360	130538	2218	S740I	Amino acid change	hypothetical protein, conserved

S	LinJ.08.0390	143400	2632	A878V	Amino acid change	hypothetical protein, conserved
S	LinJ.08.0760	324540	392	-	Synonymous	amastin-like protein
S	LinJ.08.0790	334544	45	L16F	Amino acid change	amastin-like protein
S	LinJ.08.0950	407854	850	K284T	Amino acid change	cathepsin L-like protease
S	LinJ.08.0950	408543	161	-	Synonymous	cathepsin L-like protease
S	LinJ.08.1290	488051	162	A55T	Amino acid change	beta tubulin
S	LinJ.09.1371	505507	528	A177T	Amino acid change	hypothetical protein
S	LinJ.09.1460	527670	944	-	Synonymous	hypothetical protein, conserved
S	LinJ.09.1460	528579	35	-	Synonymous	hypothetical protein, conserved
S	LinJ.10.0510	213116	162	A55P	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
S	LinJ.10.0510	213504	550	V184G	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
S	LinJ.10.0520	216837	752	-	Synonymous	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
S	LinJ.10.0520	217237	1152	L385M	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
S	LinJ.10.0530	223154	753	D252N	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-4)
S	LinJ.10.0530	223161	760	L254R	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-4)
S	LinJ.10.0530	223692	1291	P431Q	Amino acid change	GP63, leishmanolysin,metallo-peptidase, Clan MA(M), Family M8 (GP63-4)
S	LinJ.11.0070	24366	1982	D661E	Amino acid change	hypothetical protein, conserved
S	LinJ.11.0070	25598	3214	L1072R	Amino acid change	hypothetical protein, conserved
S	LinJ.11.1210	489914	242	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
S	LinJ.11.1210	489916	244	E82V	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
S	LinJ.11.1210	489952	280	G94D	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
S	LinJ.11.1210	492512	2840	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
S	LinJ.11.1210	494817	5145	P1716S	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative

						(ABCA2)
S	LinJ.11.1240	517334	5337	-	Synonymous	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
S	LinJ.12.0671	431761	150	E51Q	Amino acid change	surface antigen protein, putative
S	LinJ.12.0690	438812	405	V136M	Amino acid change	surface antigen protein 2 precursor
S	LinJ.12.0690	438890	483	D162N	Amino acid change	surface antigen protein 2 precursor
S	LinJ.12.0690	438891	484	D162G	Amino acid change	surface antigen protein 2 precursor
S	LinJ.14.0180	50655	635	-	Synonymous	carboxypeptidase, putative,metallo-peptidase, Clan MA(E), Family M32
S	LinJ.14.0370	120146	1763	-	Synonymous	hypothetical protein, conserved
S	LinJ.14.1180	477786	501	K168E	Amino acid change	kinesin K39, putative
S	LinJ.14.1180	478607	1322	-	Synonymous	kinesin K39, putative
S	LinJ.14.1180	479009	1724	-	Synonymous	kinesin K39, putative
S	LinJ.14.1190	493124	4214	-	Synonymous	kinesin K39, putative
S	LinJ.14.1540	616035	2475	G826R	Amino acid change	hypothetical protein, conserved
S	LinJ.17.0130	47719	2780	-	Synonymous	receptor-type adenylate cyclase, putative
S	LinJ.17.0140	56712	2705	-	Synonymous	receptor-type adenylate cyclase b (RAC-B2)
S	LinJ.17.1180	511521	1544	-	Synonymous	hypothetical protein, unknown function
S	LinJ.17.1180	511932	1955	-	Synonymous	hypothetical protein, unknown function
S	LinJ.18.0680	279597	1266	V423I	Amino acid change	hypothetical protein, conserved
S	LinJ.18.0690	283296	1366	I456T	Amino acid change	citrate synthase, putative
S	LinJ.19.1680	688918	4436	N1479K	Amino acid change	hypothetical protein
S	LinJ.19.1680	688926	4444	G1482D	Amino acid change	hypothetical protein
S	LinJ.19.1690	715252	2646	A883T	Amino acid change	hypothetical protein
S	LinJ.19.1690	717507	4901	-	Synonymous	hypothetical protein
S	LinJ.21.0010	4409	1156	V386A	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
S	LinJ.21.0010	4733	832	R278Q	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
S	LinJ.21.0010	4736	829	T277I	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
S	LinJ.21.0010	4764	801	A268T	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
S	LinJ.22.0002	1665	302	-	Synonymous	hypothetical protein
S	LinJ.22.0290	149916	2453	-	Synonymous	hypothetical protein, conserved
S	LinJ.22.0400	189454	2032	V678A	Amino acid change	hypothetical protein, conserved

S	LinJ.22.0410	192950	263	-	Synonymous	peptidyl-prolyl cis-trans isomerase, putative,parvulin (PAR45)
S	LinJ.22.0420	196419	904	T302S	Amino acid change	hypothetical protein, conserved
S	LinJ.22.0500	223663	252	T85A	Amino acid change	hypothetical protein, unknown function
S	LinJ.22.0650	290418	161	-	Synonymous	hypothetical protein, conserved
S	LinJ.22.1570	117722	1698	H567Y	Amino acid change	hypothetical protein
S	LinJ.23.1280	511239	1028	-	Synonymous	hypothetical protein, conserved
S	LinJ.24.2010	745940	1864	P622L	Amino acid change	hypothetical protein, conserved
S	LinJ.24.2180	792420	66	-	Synonymous	hypothetical protein, conserved
S	LinJ.24.2230	806486	928	C310Y	Amino acid change	hypothetical protein, conserved
S	LinJ.24.2250	816761	239	-	Synonymous	hypothetical protein, conserved
S	LinJ.24.2260	819602	1828	E610G	Amino acid change	hypothetical protein, conserved
S	LinJ.24.2260	820636	794	-	Synonymous	hypothetical protein, conserved
S	LinJ.24.2260	820687	743	-	Synonymous	hypothetical protein, conserved
S	LinJ.25.0490	145690	3853	E1285G	Amino acid change	hypothetical protein, conserved
S	LinJ.25.1900	702493	1842	A615T	Amino acid change	hypothetical protein, conserved
S	LinJ.26.0500	137162	2131	-	Synonymous	hypothetical protein, conserved (pseudogene)
S	LinJ.26.0520	146533	100	E34V	Amino acid change	galactofuranosyltransferase lpg1-like protein (LPG1L)
S	LinJ.26.0570	161077	784	K262R	Amino acid change	hypothetical protein, conserved
S	LinJ.27.0020	9260	847	P283R	Amino acid change	hypothetical protein, conserved
S	LinJ.27.0070	19228	594	V199M	Amino acid change	hypothetical protein, conserved
S	LinJ.27.0250	59604	1400	-	Synonymous	kinetoplast-associated protein-like protein
S	LinJ.27.0830	413861	4179	K1394E	Amino acid change	ATP-binding cassette protein subfamily A, member 8, putative (ABCA8)
S	LinJ.27.2150	940859	1417	H473R	Amino acid change	hypothetical protein, conserved
S	LinJ.28.0950	324271	166	S56F	Amino acid change	hypothetical protein
S	LinJ.28.1360	480161	908	-	Synonymous	hypothetical protein, conserved
S	LinJ.28.1480	517184	323	-	Synonymous	haloacid dehalogenase-like hydrolase, putative
S	LinJ.28.1730	612299	2238	S747P	Amino acid change	helicase-like protein
S	LinJ.28.1730	612990	1547	-	Synonymous	helicase-like protein
S	LinJ.28.1730	614166	371	-	Synonymous	helicase-like protein
S	LinJ.28.1730	614186	351	R118*	STOP	helicase-like protein
S	LinJ.28.1750	619440	111	P38A	Amino acid change	hypothetical protein, conserved



S	LinJ.28.3260	1163277	2099	-	Synonymous	hypothetical protein, conserved
S	LinJ.29.1560	671700	1709	-	Synonymous	hypothetical protein, conserved
S	LinJ.29.1750	751312	474	-	Synonymous	hypothetical protein, conserved
S	LinJ.29.1760	760890	1092	S365A	Amino acid change	hypothetical protein, conserved
S	LinJ.29.1760	761428	554	-	Synonymous	hypothetical protein, conserved
S	LinJ.29.1770	764802	1598	-	Synonymous	Zn-finger domain protein, putative
S	LinJ.29.1770	765214	1186	D396G	Amino acid change	Zn-finger domain protein, putative
S	LinJ.29.2320	985492	1087	H363R	Amino acid change	hypothetical protein, conserved
S	LinJ.30.1520	521502	86	-	Synonymous	p1%2Fs1 nuclease
S	LinJ.30.1520	521797	381	A128S	Amino acid change	p1%2Fs1 nuclease
S	LinJ.30.1520	522095	679	I227N	Amino acid change	p1%2Fs1 nuclease
S	LinJ.30.1520	522096	680	I227M	Amino acid change	p1%2Fs1 nuclease
S	LinJ.30.1540	526725	268	L90S	Amino acid change	hypothetical protein, conserved
S	LinJ.30.1540	528370	1913	-	Synonymous	hypothetical protein, conserved
S	LinJ.30.1540	529568	3111	S1038G	Amino acid change	hypothetical protein, conserved
S	LinJ.30.1560	533555	168	-	Synonymous	epsilon-adaptin (pseudogene), putative
S	LinJ.30.1630	566308	2447	-	Synonymous	ferric reductase, putative
S	LinJ.30.1890	673888	1971	A658T	Amino acid change	hypothetical protein, conserved
S	LinJ.30.1900	677280	519	P174S	Amino acid change	hypothetical protein, unknown function
S	LinJ.30.1900	678300	1539	S514P	Amino acid change	hypothetical protein, unknown function
S	LinJ.30.1900	678324	1563	S522T	Amino acid change	hypothetical protein, unknown function
S	LinJ.30.2010	716006	481	L161R	Amino acid change	hypothetical protein, unknown function
S	LinJ.30.2020	720630	357	A120T	Amino acid change	hypothetical protein, unknown function
S	LinJ.30.2040	729985	3268	M1090K	Amino acid change	calpain-like cysteine peptidase, putative, cysteine peptidase, Clan CA, family C2, putative
S	LinJ.30.2050	732514	57	R20*	STOP	ferric reductase transmembrane protein-like protein
S	LinJ.30.2550	948778	2899	V967A	Amino acid change	hypothetical protein, conserved
S	LinJ.30.2590	974798	1109	-	Synonymous	formate--tetrahydrofolate ligase (FTHS)
S	LinJ.30.2610	981671	22	V8A	Amino acid change	hypothetical protein, conserved
S	LinJ.30.3110	1118721	1155	V386I	Amino acid change	hypothetical protein, conserved
S	LinJ.30.3120	1121734	992	-	Synonymous	homoserine kinase, putative
S	LinJ.30.3470	1255128	263	-	Synonymous	hypothetical protein, conserved

S	LinJ.30.3700	1326620	338	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.0680	233219	179	M60I	Amino acid change	hypothetical protein, conserved
S	LinJ.31.0690	239665	702	F235V	Amino acid change	hypothetical protein, conserved
S	LinJ.31.0700	243529	2695	G899D	Amino acid change	hypothetical protein, conserved
S	LinJ.31.0700	243645	2579	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.0710	248075	574	A192V	Amino acid change	hypothetical protein, conserved
S	LinJ.31.0720	250492	406	S136C	Amino acid change	hypothetical protein, conserved
S	LinJ.31.0750	267365	686	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.0810	289190	382	V128A	Amino acid change	c2 domain protein, putative
S	LinJ.31.0850	303982	104	N35K	Amino acid change	hypothetical protein, conserved
S	LinJ.31.0850	303990	96	H33N	Amino acid change	hypothetical protein, conserved
S	LinJ.31.1000	369144	1655	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.1080	414263	1976	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.1080	414553	1686	G563S	Amino acid change	hypothetical protein, conserved
S	LinJ.31.1080	414708	1531	N511S	Amino acid change	hypothetical protein, conserved
S	LinJ.31.1130	433266	975	F326L	Amino acid change	N-acyl-L-amino acid amidohydrolase, putative
S	LinJ.31.1130	433267	974	-	Synonymous	N-acyl-L-amino acid amidohydrolase, putative
S	LinJ.31.1160	440705	3308	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.1230	465947	9401	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.1230	465961	9387	S3130R	Amino acid change	hypothetical protein, conserved
S	LinJ.31.1230	469890	5458	E1820A	Amino acid change	hypothetical protein, conserved
S	LinJ.31.1230	473878	1470	T491A	Amino acid change	hypothetical protein, conserved
S	LinJ.31.1230	475058	290	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.1290	505666	2654	-	Synonymous	p-glycoprotein e (ABCC4)
S	LinJ.31.1300	514857	47	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
S	LinJ.31.1310	517418	3935	-	Synonymous	ATP-binding cassette protein subfamily C, member 6, putative (ABCC6)
S	LinJ.31.1320	524294	2525	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.1320	525018	1801	Q601P	Amino acid change	hypothetical protein, conserved
S	LinJ.31.1320	525828	991	H331R	Amino acid change	hypothetical protein, conserved
S	LinJ.31.1330	531932	1697	-	Synonymous	hypothetical protein, conserved

S	LinJ.31.1670	768023	923	-	Synonymous	hypothetical protein, conserved
S	LinJ.31.2060	974736	332	E111D	Amino acid change	succinyl-diaminopimelate desuccinylase-like protein
S	LinJ.31.3300	1454671	115	A39V	Amino acid change	protein kinase, putative
S	LinJ.32.0380	139640	553	Q185R	Amino acid change	hypothetical protein, conserved
S	LinJ.32.0390	142785	839	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.0430	167273	155	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.0480	178061	2071	N691S	Amino acid change	hypothetical protein, conserved
S	LinJ.32.0480	179762	370	M124T	Amino acid change	hypothetical protein, conserved
S	LinJ.32.0480	179826	306	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.0480	179849	283	T95S	Amino acid change	hypothetical protein, conserved
S	LinJ.32.0540	190161	432	M145L	Amino acid change	hypothetical protein, conserved
S	LinJ.32.0570	196778	56	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.0590	202583	20	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.0600	206145	1220	-	Synonymous	ATP-dependent RNA helicase-like protein, putative, RNA helicase, putative
S	LinJ.32.0600	206202	1277	-	Synonymous	ATP-dependent RNA helicase-like protein, putative, RNA helicase, putative
S	LinJ.32.0600	206349	1424	-	Synonymous	ATP-dependent RNA helicase-like protein, putative, RNA helicase, putative
S	LinJ.32.0610	208487	771	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.0630	214531	2192	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.0990	360139	1098	S367G	Amino acid change	hypothetical protein, conserved
S	LinJ.32.0990	360142	1101	T368A	Amino acid change	hypothetical protein, conserved
S	LinJ.32.1040	396546	56	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.1040	396846	356	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.1040	397232	742	S248N	Amino acid change	hypothetical protein, conserved
S	LinJ.32.1050	403930	1564	A522E	Amino acid change	hypothetical protein, conserved
S	LinJ.32.1100	419054	251	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.1100	419105	302	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.1100	419756	953	M318I	Amino acid change	hypothetical protein, conserved
S	LinJ.32.1490	565636	550	T184I	Amino acid change	hypothetical protein, conserved
S	LinJ.32.1520	572302	7970	-	Synonymous	phosphatidylinositol 3-related kinase, putative

S	LinJ.32.1520	573594	6678	F2227L	Amino acid change	phosphatidylinositol 3-related kinase, putative
S	LinJ.32.1520	575046	5226	-	Synonymous	phosphatidylinositol 3-related kinase, putative
S	LinJ.32.1520	579378	894	G299S	Amino acid change	phosphatidylinositol 3-related kinase, putative
S	LinJ.32.2040	760586	813	G272R	Amino acid change	hypothetical protein, conserved
S	LinJ.32.2040	761062	337	S113L	Amino acid change	hypothetical protein, conserved
S	LinJ.32.2240	824770	2570	-	Synonymous	hypothetical protein, conserved
S	LinJ.32.3470	1311545	731	-	Synonymous	chaperonin alpha subunit, putative
S	LinJ.32.3620	1382216	471	L158I	Amino acid change	hypothetical protein, conserved
S	LinJ.33.3050	1244062	2633	-	Synonymous	hypothetical protein, unknown function
S	LinJ.33.3050	1247021	5592	G1865R	Amino acid change	hypothetical protein, unknown function
S	LinJ.33.3230	1378370	3605	-	Synonymous	hypothetical protein, conserved
S	LinJ.33.3230	1378541	3776	-	Synonymous	hypothetical protein, conserved
S	LinJ.34.0330	113268	1042	Y348S	Amino acid change	hypothetical protein, conserved
S	LinJ.34.0380	130280	917	-	Synonymous	DNA-directed RNA polymerase III subunit C1, putative,DNA-directed RNA polymerase III largest subunit, putative (RPC1)
S	LinJ.34.0480	162759	3212	-	Synonymous	hypothetical protein, unknown function
S	LinJ.34.0710	306551	2251	G751A	Amino acid change	flagellar attachment zone protein, putative
S	LinJ.34.2360	1002538	2835	A946T	Amino acid change	hypothetical protein, unknown function
S	LinJ.35.0370	93965	129	G44S	Amino acid change	ATP-dependent DEAD-box RNA helicase, putative
S	LinJ.35.0620	277087	242	M81I	Amino acid change	hypothetical protein, unknown function
S	LinJ.35.3040	1218792	149	-	Synonymous	hypothetical protein, conserved
S	LinJ.35.4450	1742249	244	M82K	Amino acid change	hypothetical protein, conserved
S	LinJ.35.5000	1904537	1375	N459S	Amino acid change	hypothetical protein, conserved
S	LinJ.35.5000	1904779	1617	A540P	Amino acid change	hypothetical protein, conserved
S	LinJ.35.5010	1910700	329	-	Synonymous	hypothetical protein, conserved
S	LinJ.35.5290	2017492	188	-	Synonymous	hypothetical protein, conserved
S	LinJ.35.5340	2037740	2367	-	Synonymous	hypothetical protein, conserved
S	LinJ.36.6750	2492266	1021	S341T	Amino acid change	hypothetical protein, unknown function
S	LinJ.36.6770	2502117	1849	F617S	Amino acid change	histidine secretory acid phosphatase, putative
S	LinJ.36.6770	2502186	1780	I594T	Amino acid change	histidine secretory acid phosphatase, putative
S	LinJ.36.6770	2502565	1401	T468A	Amino acid change	histidine secretory acid phosphatase, putative
S,WT	LinJ.02.0670	309833	110	-	Synonymous	hypothetical protein, conserved

S,WT	LinJ.02.0670	311991	2268	P757S	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.02.0680	315301	1049	-	Synonymous	ATP-dependent Clp protease subunit, heat shock protein 78 (HSP78), putative
S,WT	LinJ.04.0870	334202	1569	C524R	Amino acid change	hypothetical protein
S,WT	LinJ.05.0140	42874	70	S24I	Amino acid change	nucleolar RNA helicase II, putative
S,WT	LinJ.05.0400	130966	2274	T759P	Amino acid change	structural maintenance of chromosome (SMC), putative
S,WT	LinJ.05.0670	225209	368	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.05.0670	225499	658	T220N	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.05.0670	227811	2970	R991C	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.07.0990	424353	4174	Y1392C	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.08.0760	324542	394	A132V	Amino acid change	amastin-like protein
S,WT	LinJ.08.0790	334831	332	-	Synonymous	amastin-like protein
S,WT	LinJ.10.1450	538721	1818	V607I	Amino acid change	pteridine transporter, putative
S,WT	LinJ.11.1210	493843	4171	T1391I	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
S,WT	LinJ.11.1240	513970	1973	-	Synonymous	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
S,WT	LinJ.14.1180	478561	1276	A426G	Amino acid change	kinesin K39, putative
S,WT	LinJ.16.0180	61880	3731	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.17.1150	497846	1156	N386S	Amino acid change	hydrolase-like protein,esterase-like protein
S,WT	LinJ.17.1160	503624	1933	A645V	Amino acid change	hydrolase-like protein,esterase-like protein
S,WT	LinJ.17.1170	507450	1311	K438E	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.17.1170	507476	1337	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.17.1180	511160	1183	G395A	Amino acid change	hypothetical protein, unknown function
S,WT	LinJ.18.1270	524353	1259	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.18.1280	526397	301	V101A	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.19.0380	159838	4088	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.21.0010	4268	1297	T433R	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
S,WT	LinJ.21.0010	4273	1292	-	Synonymous	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
S,WT	LinJ.21.2240	756371	212	-	Synonymous	beta tubulin
S,WT	LinJ.22.0380	183903	550	F184S	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.22.0410	193172	41	-	Synonymous	peptidyl-prolyl cis-trans isomerase, putative,parvulin (PAR45)

S,WT	LinJ.22.0420	195724	1599	T534A	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.22.0430	198388	2495	-	Synonymous	kinesin, putative
S,WT	LinJ.24.2190	794113	62	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.25.0360	105720	1298	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.26.0530	148468	1537	P513L	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.27.0120	30995	1646	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.27.0150	38389	301	S101N	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.28.1360	480473	1220	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.28.1870	682088	2650	Q884P	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.29.2770	1152405	2324	-	Synonymous	helicase, putative
S,WT	LinJ.29.2770	1152440	2359	A787V	Amino acid change	helicase, putative
S,WT	LinJ.30.1510	515453	1608	M537V	Amino acid change	kinesin, putative
S,WT	LinJ.30.1510	516568	2723	-	Synonymous	kinesin, putative
S,WT	LinJ.30.1530	524818	539	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.30.1540	526715	258	G87C	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.30.1890	673960	2043	I682V	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.30.1900	677747	986	-	Synonymous	hypothetical protein, unknown function
S,WT	LinJ.30.2010	716433	908	F303L	Amino acid change	hypothetical protein, unknown function
S,WT	LinJ.30.2020	720385	112	R38K	Amino acid change	hypothetical protein, unknown function
S,WT	LinJ.30.2040	727781	1064	-	Synonymous	calpain-like cysteine peptidase, putative, cysteine peptidase, Clan CA, family C2, putative
S,WT	LinJ.30.2630	984817	1806	T603A	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.30.2660	991402	446	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.30.2680	994504	854	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.30.3110	1119582	294	K99E	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.30.3470	1256702	1837	H613R	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.31.0690	239433	934	T312I	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.31.0700	245808	416	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.31.0750	267836	215	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.31.0950	349862	1519	P507H	Amino acid change	sodium stibogluconate resistance protein, putative
S,WT	LinJ.31.0980	363331	749	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.31.1040	401452	706	N236S	Amino acid change	hypothetical protein, conserved

S,WT	LinJ.31.1130	433719	522	I175V	Amino acid change	N-acyl-L-amino acid amidohydrolase, putative
S,WT	LinJ.31.1300	510832	4072	T1358M	Amino acid change	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
S,WT	LinJ.31.1300	512187	2717	-	Synonymous	ATP-binding cassette protein subfamily C, member 5, putative (ABCC5)
S,WT	LinJ.31.1310	516899	4454	-	Synonymous	ATP-binding cassette protein subfamily C, member 6, putative (ABCC6)
S,WT	LinJ.31.1320	525680	1139	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.31.1320	526588	231	D78Y	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.31.1470	656202	920	-	Synonymous	hypothetical protein, unknown function
S,WT	LinJ.31.1850	846725	499	W167L	Amino acid change	amino acid permease (AAT8.3)
S,WT	LinJ.31.2290	1094210	3769	P1257Q	Amino acid change	hypothetical protein, unknown function
S,WT	LinJ.31.2850	1310376	2058	P687S	Amino acid change	kinetoplast-associated protein-like protein
S,WT	LinJ.32.0390	143267	357	W120R	Amino acid change	hypothetical protein, conserved
S,WT	LinJ.32.0610	208792	1076	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.32.1520	572721	7551	P2518A	Amino acid change	phosphatidylinositol 3-related kinase, putative
S,WT	LinJ.32.1520	573409	6863	-	Synonymous	phosphatidylinositol 3-related kinase, putative
S,WT	LinJ.32.1520	576927	3345	-	Synonymous	phosphatidylinositol 3-related kinase, putative
S,WT	LinJ.32.1520	577653	2619	Q874E	Amino acid change	phosphatidylinositol 3-related kinase, putative
S,WT	LinJ.32.1520	579496	776	-	Synonymous	phosphatidylinositol 3-related kinase, putative
S,WT	LinJ.32.1520	579714	558	A187T	Amino acid change	phosphatidylinositol 3-related kinase, putative
S,WT	LinJ.32.1520	579715	557	-	Synonymous	phosphatidylinositol 3-related kinase, putative
S,WT	LinJ.33.3050	1241923	494	-	Synonymous	hypothetical protein, unknown function
S,WT	LinJ.33.3050	1241983	554	K185N	Amino acid change	hypothetical protein, unknown function
S,WT	LinJ.33.3050	1244016	2587	R863H	Amino acid change	hypothetical protein, unknown function
S,WT	LinJ.34.0160	51995	104	-	Synonymous	malate dehydrogenase, putative
S,WT	LinJ.34.0310	106019	507	-	Synonymous	hypothetical protein, conserved
S,WT	LinJ.34.0380	131797	2434	D812G	Amino acid change	DNA-directed RNA polymerase III subunit C1, putative,DNA-directed RNA polymerase III largest subunit, putative (RPC1)
S,WT	LinJ.34.0480	160443	896	-	Synonymous	hypothetical protein, unknown function
S,WT	LinJ.34.0480	163132	3585	G1196S	Amino acid change	hypothetical protein, unknown function
S,WT	LinJ.34.0500	184398	6212	-	Synonymous	calcium channel protein, putative,ion transporter, putative

S,WT	LinJ.35.0490	154931	4592	-	Synonymous	proteophosphoglycan ppg4
S,WT	LinJ.35.5010	1910571	200	-	Synonymous	hypothetical protein, conserved
WT	LinJ.01.0020	6637	1165	E389V	Amino acid change	hypothetical protein, conserved
WT	LinJ.01.0020	6678	1124	-	Synonymous	hypothetical protein, conserved
WT	LinJ.01.0170	42063	1066	E356A	Amino acid change	hypothetical protein, conserved
WT	LinJ.01.0170	42207	922	T308K	Amino acid change	hypothetical protein, conserved
WT	LinJ.01.0170	42230	899	-	Synonymous	hypothetical protein, conserved
WT	LinJ.01.0170	42527	602	-	Synonymous	hypothetical protein, conserved
WT	LinJ.01.0180	44924	1940	-	Synonymous	CLC-type chloride channel, putative
WT	LinJ.01.0180	45569	1295	-	Synonymous	CLC-type chloride channel, putative
WT	LinJ.01.0180	46079	785	-	Synonymous	CLC-type chloride channel, putative
WT	LinJ.01.0410	99015	1815	H606Y	Amino acid change	hypothetical protein, conserved
WT	LinJ.03.0780	307745	229	M77T	Amino acid change	hypothetical protein, conserved
WT	LinJ.04.0590	243416	1548	T517A	Amino acid change	hypothetical protein
WT	LinJ.04.0610	251455	620	-	Synonymous	hypothetical protein
WT	LinJ.04.0610	251464	611	-	Synonymous	hypothetical protein
WT	LinJ.05.0670	226088	1247	-	Synonymous	hypothetical protein, conserved
WT	LinJ.06.0450	149796	956	-	Synonymous	hypothetical protein, conserved
WT	LinJ.08.0750	322686	686	-	Synonymous	tuzin, putative
WT	LinJ.08.0950	407850	854	-	Synonymous	cathepsin L-like protease
WT	LinJ.08.0960	410489	976	L326Q	Amino acid change	cathepsin L-like protease
WT	LinJ.08.0960	410490	975	L326M	Amino acid change	cathepsin L-like protease
WT	LinJ.09.1371	505534	501	I168V	Amino acid change	hypothetical protein
WT	LinJ.09.1450	524290	847	L283R	Amino acid change	hypothetical protein, conserved
WT	LinJ.10.0510	213521	567	D190H	Amino acid change	GP63, leishmanolysin, metallo-peptidase, Clan MA(M), Family M8 (GP63-3)
WT	LinJ.10.0530	223289	888	N297H	Amino acid change	GP63, leishmanolysin, metallo-peptidase, Clan MA(M), Family M8 (GP63-4)
WT	LinJ.11.1210	490001	329	-	Synonymous	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)
WT	LinJ.11.1210	490343	671	K224N	Amino acid change	ATP-binding cassette protein subfamily A, member 2, putative (ABCA2)



WT	LinJ.11.1240	513316	1319	Q440H	Amino acid change	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
WT	LinJ.11.1240	514142	2145	D716N	Amino acid change	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
WT	LinJ.11.1240	514144	2147	-	Synonymous	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
WT	LinJ.11.1240	515654	3657	D1220N	Amino acid change	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
WT	LinJ.11.1240	515663	3666	L1223V	Amino acid change	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
WT	LinJ.11.1240	516715	4718	-	Synonymous	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
WT	LinJ.11.1240	516721	4724	-	Synonymous	ATP-binding cassette protein subfamily A, member 4, putative,ABC transporter, putative (ABCA4)
WT	LinJ.12.0662	388457	445	P149L	Amino acid change	surface antigen protein 2, putative
WT	LinJ.12.0662	388576	564	N189D	Amino acid change	surface antigen protein 2, putative
WT	LinJ.12.0663	396408	1991	-	Synonymous	surface antigen protein 2, putative
WT	LinJ.12.0666	411767	695	-	Synonymous	surface antigen protein 2, putative
WT	LinJ.12.0690	438721	314	-	Synonymous	surface antigen protein 2 precursor
WT	LinJ.14.0160	43434	949	D317G	Amino acid change	hypothetical protein, conserved
WT	LinJ.14.1180	483517	6232	K2078R	Amino acid change	kinesin K39, putative
WT	LinJ.14.1540	616087	2527	E843A	Amino acid change	hypothetical protein, conserved
WT	LinJ.15.0490	168503	3786	D1263N	Amino acid change	hypothetical protein (pseudogene)
WT	LinJ.15.0490	168504	3787	D1263G	Amino acid change	hypothetical protein (pseudogene)
WT	LinJ.15.0490	168512	3795	T1266A	Amino acid change	hypothetical protein (pseudogene)
WT	LinJ.16.0090	27323	1609	D537G	Amino acid change	hypothetical protein, conserved
WT	LinJ.17.1090	467016	13660	L4554S	Amino acid change	hypothetical protein, conserved
WT	LinJ.17.1090	467028	13672	V4558A	Amino acid change	hypothetical protein, conserved
WT	LinJ.17.1160	503313	1622	-	Synonymous	hydrolase-like protein,esterase-like protein
WT	LinJ.17.1160	503399	1708	S570L	Amino acid change	hydrolase-like protein,esterase-like protein
WT	LinJ.17.1180	511117	1140	A381T	Amino acid change	hypothetical protein, unknown function
WT	LinJ.17.1180	511155	1178	D393E	Amino acid change	hypothetical protein, unknown function
WT	LinJ.17.1180	511200	1223	-	Synonymous	hypothetical protein, unknown function

WT	LinJ.18.0180	74156	434	-	Synonymous	hypothetical protein, unknown function
WT	LinJ.18.0390	163742	1314	H439Y	Amino acid change	hypothetical protein, conserved
WT	LinJ.19.0380	159964	4214	-	Synonymous	hypothetical protein, conserved
WT	LinJ.19.1680	687517	3035	-	Synonymous	hypothetical protein
WT	LinJ.19.1690	716502	3896	-	Synonymous	hypothetical protein
WT	LinJ.19.1690	717092	4486	A1496G	Amino acid change	hypothetical protein
WT	LinJ.20.0270	81396	770	-	Synonymous	deoxyhypusine synthase-like (DHS20)
WT	LinJ.20.0270	81639	527	-	Synonymous	deoxyhypusine synthase-like (DHS20)
WT	LinJ.20.1070	439943	406	-	Synonymous	CMP-sialic acid transporter, putative
WT	LinJ.20.1070	439944	407	-	Synonymous	CMP-sialic acid transporter, putative
WT	LinJ.20.1070	439955	418	-	Synonymous	CMP-sialic acid transporter, putative
WT	LinJ.20.1520	649969	559	D187G	Amino acid change	hypothetical protein, unknown function
WT	LinJ.21.0010	3450	2115	-	Synonymous	phosphoglycan beta 1,3 galactosyltransferase 2 (SCG2)
WT	LinJ.21.1270	421833	1242	A415T	Amino acid change	hypothetical protein, conserved
WT	LinJ.21.1270	421840	1249	E417A	Amino acid change	hypothetical protein, conserved
WT	LinJ.22.0290	149880	2489	-	Synonymous	hypothetical protein, conserved
WT	LinJ.22.0500	222371	1544	-	Synonymous	hypothetical protein, unknown function
WT	LinJ.22.0500	222892	1023	R342C	Amino acid change	hypothetical protein, unknown function
WT	LinJ.22.0500	223217	698	-	Synonymous	hypothetical protein, unknown function
WT	LinJ.23.1220	497746	691	G231D	Amino acid change	hydrophilic acylated surface protein b (HASPb)
WT	LinJ.24.2100	774986	877	G293V	Amino acid change	tubulin folding cofactor D, putative
WT	LinJ.24.2250	816622	378	-	Synonymous	hypothetical protein, conserved
WT	LinJ.25.2060	745017	4103	-	Synonymous	hypothetical protein, conserved
WT	LinJ.25.2570	882648	2067	L690V	Amino acid change	phosphoglycan beta 1,3 galactosyltransferase 6 (SCG6)
WT	LinJ.26.1880	683215	1696	R566H	Amino acid change	hypothetical protein, conserved
WT	LinJ.27.0010	5818	114	D39N	Amino acid change	hypothetical protein, conserved
WT	LinJ.27.0010	5819	113	-	Synonymous	hypothetical protein, conserved
WT	LinJ.27.0020	10023	84	A29T	Amino acid change	hypothetical protein, conserved
WT	LinJ.27.0020	8582	1525	E509V	Amino acid change	hypothetical protein, conserved
WT	LinJ.27.0020	8663	1444	T482M	Amino acid change	hypothetical protein, conserved
WT	LinJ.27.0020	8678	1429	A477D	Amino acid change	hypothetical protein, conserved
WT	LinJ.27.0020	8698	1409	-	Synonymous	hypothetical protein, conserved

WT	LinJ.27.0020	8739	1368	-	Synonymous	hypothetical protein, conserved
WT	LinJ.27.0020	8809	1298	-	Synonymous	hypothetical protein, conserved
WT	LinJ.27.0120	31142	1499	-	Synonymous	hypothetical protein, conserved
WT	LinJ.27.0140	35853	385	A129D	Amino acid change	hypothetical protein, conserved
WT	LinJ.27.0140	35951	287	-	Synonymous	hypothetical protein, conserved
WT	LinJ.27.0140	35952	286	D96G	Amino acid change	hypothetical protein, conserved
WT	LinJ.27.0140	36194	44	-	Synonymous	hypothetical protein, conserved
WT	LinJ.27.0500	160488	14479	S4827N	Amino acid change	calpain-like cysteine peptidase, putative,cysteine peptidase, Clan CA, family C2, putative
WT	LinJ.27.0830	415163	2877	P960S	Amino acid change	ATP-binding cassette protein subfamily A, member 8, putative (ABCA8)
WT	LinJ.27.1070	500220	270	P91A	Amino acid change	histone H1, putative
WT	LinJ.27.2670	258501	752	-	Synonymous	hypothetical protein, conserved
WT	LinJ.27.2670	258507	758	-	Synonymous	hypothetical protein, conserved
WT	LinJ.27.2680	263911	151	V51A	Amino acid change	amino acid permease, putative
WT	LinJ.28.0190	58599	1297	L433P	Amino acid change	hypothetical protein, unknown function
WT	LinJ.28.1570	559352	1361	-	Synonymous	hypothetical protein, conserved
WT	LinJ.28.1810	651435	5181	V1728I	Amino acid change	sulfate transporter-like protein
WT	LinJ.28.1880	688046	2929	A977V	Amino acid change	protein kinase, putative
WT	LinJ.28.2390	882119	1667	-	Synonymous	cyclin dependent kinase-binding protein, putative
WT	LinJ.28.3260	1161368	190	S64F	Amino acid change	hypothetical protein, conserved
WT	LinJ.29.1060	375628	1688	-	Synonymous	kinesin, putative
WT	LinJ.30.0330	104056	2695	G899D	Amino acid change	hypothetical protein, conserved
WT	LinJ.30.0330	106038	713	S238R	Amino acid change	hypothetical protein, conserved
WT	LinJ.30.1250	402931	548	-	Synonymous	hypothetical protein, unknown function
WT	LinJ.30.1510	515713	1868	-	Synonymous	kinesin, putative
WT	LinJ.30.1510	515852	2007	S670P	Amino acid change	kinesin, putative
WT	LinJ.30.1510	516617	2772	T925A	Amino acid change	kinesin, putative
WT	LinJ.30.1520	521580	164	-	Synonymous	p1%2Fs1 nuclease
WT	LinJ.30.1530	524823	544	H182R	Amino acid change	hypothetical protein, conserved
WT	LinJ.30.1540	527686	1229	-	Synonymous	hypothetical protein, conserved
WT	LinJ.30.1890	672927	1010	-	Synonymous	hypothetical protein, conserved

WT	LinJ.30.1890	673008	1091	-	Synonymous	hypothetical protein, conserved
WT	LinJ.30.1890	673620	1703	-	Synonymous	hypothetical protein, conserved
WT	LinJ.30.1890	673939	2022	M675V	Amino acid change	hypothetical protein, conserved
WT	LinJ.30.2010	716467	942	A315S	Amino acid change	hypothetical protein, unknown function
WT	LinJ.30.2020	720517	244	A82V	Amino acid change	hypothetical protein, unknown function
WT	LinJ.30.2030	723256	7	N3S	Amino acid change	mannosyltransferase, putative (GPI14)
WT	LinJ.30.2610	980071	1622	-	Synonymous	hypothetical protein, conserved
WT	LinJ.30.2610	980962	731	-	Synonymous	hypothetical protein, conserved
WT	LinJ.30.2630	984689	1934	-	Synonymous	hypothetical protein, conserved
WT	LinJ.30.3470	1255348	483	A162S	Amino acid change	hypothetical protein, conserved
WT	LinJ.30.3700	1326733	451	R151T	Amino acid change	hypothetical protein, conserved
WT	LinJ.31.0710	248501	148	G50D	Amino acid change	hypothetical protein, conserved
WT	LinJ.31.0750	267845	206	-	Synonymous	hypothetical protein, conserved
WT	LinJ.31.0750	267855	196	G66V	Amino acid change	hypothetical protein, conserved
WT	LinJ.31.0900	329546	721	A241G	Amino acid change	amino acid permease 3 (AAP3)
WT	LinJ.31.1120	430723	393	K132E	Amino acid change	hypothetical protein, conserved
WT	LinJ.31.1120	430869	247	G83D	Amino acid change	hypothetical protein, conserved
WT	LinJ.31.1120	430904	212	-	Synonymous	hypothetical protein, conserved
WT	LinJ.31.1130	433331	910	N304S	Amino acid change	N-acyl-L-amino acid amidohydrolase, putative
WT	LinJ.31.1130	433343	898	M300T	Amino acid change	N-acyl-L-amino acid amidohydrolase, putative
WT	LinJ.31.1230	468845	6503	-	Synonymous	hypothetical protein, conserved
WT	LinJ.31.1230	474984	364	G122A	Amino acid change	hypothetical protein, conserved
WT	LinJ.31.1310	520717	636	E213K	Amino acid change	ATP-binding cassette protein subfamily C, member 6, putative (ABCC6)
WT	LinJ.31.1330	532845	784	T262M	Amino acid change	hypothetical protein, conserved
WT	LinJ.31.1340	535957	7678	V2560A	Amino acid change	hypothetical protein, conserved
WT	LinJ.31.1340	537372	6263	-	Synonymous	hypothetical protein, conserved
WT	LinJ.31.1340	542223	1412	-	Synonymous	hypothetical protein, conserved
WT	LinJ.31.1470	656157	965	E322D	Amino acid change	hypothetical protein, unknown function
WT	LinJ.31.1560	731944	5227	R1743H	Amino acid change	protein kinase, putative
WT	LinJ.31.1830	836342	445	L149W	Amino acid change	amino acid permease (AAT8.2)
WT	LinJ.31.1850	845772	1452	V485I	Amino acid change	amino acid permease (AAT8.3)

WT	LinJ.31.1860	852825	1184	-	Synonymous	amino acid permease (AAT8.4)
WT	LinJ.31.1920	908420	1532	-	Synonymous	mannosyltransferase-like protein
WT	LinJ.31.2060	973670	1398	H467D	Amino acid change	succinyl-diaminopimelate desuccinylase-like protein
WT	LinJ.31.2290	1094090	3889	P1297Q	Amino acid change	hypothetical protein, unknown function
WT	LinJ.31.2370	1124120	384	L129F	Amino acid change	3'-5'-nucleotidase/nuclease, putative
WT	LinJ.32.1100	419484	681	T228A	Amino acid change	hypothetical protein, conserved
WT	LinJ.32.2790	1041277	4934	-	Synonymous	hypothetical protein, conserved
WT	LinJ.32.3690	1409139	1388	-	Synonymous	DEAD-box helicase, putative
WT	LinJ.33.0280	81870	246	N83D	Amino acid change	RRG-containing protein 2, putative,MRB1-associated protein, putative (RRG2)
WT	LinJ.33.2540	981261	811	A271G	Amino acid change	hypothetical protein, conserved
WT	LinJ.33.3050	1242649	1220	-	Synonymous	hypothetical protein, unknown function
WT	LinJ.33.3050	1246983	5554	P1852R	Amino acid change	hypothetical protein, unknown function
WT	LinJ.33.3230	1379904	5139	A1714T	Amino acid change	hypothetical protein, conserved
WT	LinJ.34.0480	163152	3605	-	Synonymous	hypothetical protein, unknown function
WT	LinJ.34.0480	163472	3925	Q1309L	Amino acid change	hypothetical protein, unknown function
WT	LinJ.34.0500	181581	3395	-	Synonymous	calcium channel protein, putative,ion transporter, putative
WT	LinJ.34.0720	310932	2560	D854G	Amino acid change	flagellar attachment zone protein, putative
WT	LinJ.34.1730	727628	53	-	Synonymous	amastin-like surface protein, putative
WT	LinJ.35.0530	218627	865	I289T	Amino acid change	proteophosphoglycan 5
WT	LinJ.35.5020	1912909	1001	-	Synonymous	hypothetical protein, conserved
WT	LinJ.35.5350	2039259	358	L120S	Amino acid change	hypothetical protein, conserved