

**Supplementary Table 4: Genes differentially expressed between amastigotes of three *Leishmania* species**

<i>L. braziliensis</i> vs. <i>L. major</i>						
<i>L.braz</i> GeneDB ID	<i>L.maj</i> GeneDB ID	Product	LogFC	P.Value	Preferential expression	Note
LbrM04_V2.0370	LmjF04.0340	ADP-ribosylation factor	-1.67	0.0178	<i>L. braziliensis</i>	NMT
LbrM06_V2.0380 <sup>§</sup>	LmjF06.0400 <sup>§</sup>	Fructose biphosphate aldolase	1.08	0.0011	<i>L. major</i>	
LbrM07_V2.0880 <sup>§</sup>	LmjF07.0800	Flavoprotein subunit protein	0.78	0.0022	<i>L. major</i>	
LbrM08_V2.0810 / LbrM08_V2.0820 / LbrM08_V2.0830	LmjF08.1020	Cathepsin L-like protease	-1.58	0.0001	<i>L. braziliensis</i>	
LbrM10_V2.0990	not present in geneDB	Phosphate repressible phosphate permease	1.58	0.0001	<i>L. major</i>	
LbrM24_V2.1790	LmjF24.1730	Protein kinase	1.15	0.0016	<i>L. major</i>	NMT
LbrM25_V2.1020	not present in geneDB	Rnase III gene	-1.10	0.0000	<i>L. braziliensis</i>	
LbrM30_V2.0190 <sup>§</sup>	LmjF30.0190 <sup>§</sup>	Polynucleotide kinase 3'-phosphatase	-0.90	0.0014	<i>L. braziliensis</i>	
LbrM30_V2.0980	LmjF30.0850 / LmjF30.0860	Surface protein amastin	0.81	0.0017	<i>L. major</i>	
LbrM31_V2.1010 <sup>§</sup>	LmjF31.0830	Triacylglycerol lipase	0.78	0.0003	<i>L. major</i>	
LbrM31_V2.3150	LmjF31.2790	ADP-ribosylation factor	0.90	0.0118	<i>L. major</i>	NMT
LbrM31_V2.3260	LmjF31.2900	Nucleoporin (NUP54/57)	1.34	0.0170	<i>L. major</i>	SRR
LbrM35_V2.3370	LmjF36.3150	ADP-ribosylation factor GTPase activating protein	-0.98	0.0016	<i>L. braziliensis</i>	
LbrM35_V2.5630	LmjF36.5370	Tyrosine specific protein phosphatase	1.50	0.0001	<i>L. major</i>	
LbrM06_V2.0730	LmjF06.0740	Unknown function	-1.00	0.0050	<i>L. braziliensis</i>	SRR
LbrM07_V2.0890 - LbrM07_V2.0910	LmjF07.0840	Unknown function	1.41	0.0010	<i>L. major</i>	SRR
LbrM16_V2.0940	LmjF16.0930	Unknown function	-1.26	0.0262	<i>L. braziliensis</i>	NMT

LbrM20_V2.0550	LmjF34.0620	Unknown function	-2.12	0.0058	<i>L. braziliensis</i>	SRR
LbrM20_V2.0610	LmjF34.0680	Unknown function	1.24	0.0173	<i>L. major</i>	SSR
LbrM21_V2.0910	LmjF21.0820	Unknown function	-0.92	0.0001	<i>L. braziliensis</i>	SRR
LbrM24_V2.1520	LmjF24.1360	Unknown function	1.29	0.0002	<i>L. major</i>	NMT
LbrM25_V2.1380 / LbrM25_V2.2450	LmjF25.1820	Unknown function	0.95	0.0050	<i>L. major</i>	SRR
LbrM25_V2.1870	LmjF25.2280	Unknown function	0.90	0.0023	<i>L. major</i>	
LbrM27_V2.2850 <sup>§</sup>	not present in geneDB	Unknown function	0.98	0.0014	<i>L. major</i>	SRR
LbrM31_V2.0130	LmjF31.0130	Unknown function	0.99	0.0017	<i>L. major</i>	
LbrM31_V2.0370 <sup>§</sup>	LmjF31.0260	Unknown function	1.35	0.0105	<i>L. major</i>	
LbrM31_V2.1560	LmjF31.1400	Unknown function	1.44	0.0072	<i>L. major</i>	NMT
LbrM34_V2.5330	LmjF35.5390	Unknown function	-0.79	0.0021	<i>L. braziliensis</i>	SRR
LbrM34_V2.5330	LmjF35.5390	Unknown function	-0.91	0.0047	<i>L. braziliensis</i>	

### *L. braziliensis* vs *L. infantum*

<i>L.braz</i> GeneDB ID	<i>L.inf</i> GeneDB ID	Product	LogFC	P.Value	Preferentially expression	Note
LbrM04_V2.0360	LinJ04_V3.0320	Mitochondrial exoribonuclease DSS-1,	1.19	0.0177	<i>L. infantum</i>	SRR
LbrM07_V2.0880 <sup>§</sup>	LinJ07_V3.0910	Flavoprotein subunit protein	1.03	0.0003	<i>L. infantum</i>	
LbrM07_V2.1050	LinJ07_V3.1150	RNA binding protein-like protein	1.61	0.0317	<i>L. infantum</i>	SRR
LbrM08_V2.0810 / LbrM08_V2.0820 / LbrM08_V2.0830	LinJ08_V3.0960	Cathepsin L-like protease	-1.49	0.0005	<i>L. braziliensis</i>	
LbrM10_V2.0990	LinJ20_V3.0040	Phosphate repressible phosphate permease	0.87	0.0214	<i>L. infantum</i>	
LbrM11_V2.0080	LinJ11_V3.0400	Tubulin-tyrosine ligase-like protein	1.11	0.0044	<i>L. infantum</i>	SRR
LbrM12_V2.0750	LinJ12_v4.0671	Surface antigen proteins (1 and 2),	1.67	0.0000	<i>L. infantum</i>	SRR
LbrM13_V2.1330	not present in	Amastin	-1.07	0.0419	<i>L. braziliensis</i>	

	geneDB					
LbrM22_V2.1590 <sup>§</sup>	LinJ22_V3.1530	Phosphoinositide-specific phosphatase C	0.98	0.0020	<i>L. infantum</i>	
LbrM23_V2.0390	not present in geneDB	RNase III domain gene	1.11	0.0001	<i>L. infantum</i>	
LbrM25_V2.1020	not present in geneDB	Rnase III gene	-1.26	0.0000	<i>L. braziliensis</i>	
LbrM30_V2.2930 <sup>§</sup>	LinJ30_V3.2970	Phospholipase c-like protein	-1.12	0.0297	<i>L. braziliensis</i>	
LbrM31_V2.1680	LinJ31_V3.1490	Surface membrane protein gp46-like protein	1.71	0.0479	<i>L. infantum</i>	SRR
LbrM31_V2.3150	LinJ31_V3.2890	ADP-ribosylation factor,	0.79	0.0357	<i>L. infantum</i>	NMT
LbrM31_V2.3260	LinJ31_V3.3000	Nucleoporin (NUP54/57),	1.46	0.0144	<i>L. infantum</i>	SRR
LbrM33_V2.2660	LinJ33_V3.2510	Golgi reassembly stacking protein (GRASP homologue),	0.83	0.0070	<i>L. infantum</i>	NMT
LbrM34_V2.0520 / LbrM34_V2.0520	LinJ35_V3.0510	Proteophosphoglycan ppg3,	0.81	0.0005	<i>L. infantum</i>	SSR
LbrM34_V2.0520 / LbrM34_V2.0520	LinJ35_V3.0530	Proteophosphoglycan ppg3,	1.53	0.0000	<i>L. infantum</i>	SSR
LbrM34_V2.1870 <sup>§</sup>	LinJ35_V3.1950	Ribosomal protein L32 like protein	-0.81	0.0049	<i>L. braziliensis</i>	
LbrM35_V2.1760	LinJ36_V3.1680	Universal minicircle sequence binding protein 1	0.86	0.0006	<i>L. infantum</i>	SRR
LbrM35_V2.3370	LinJ36_V3.3300	ADP-ribosylation factor GTPase activating protein,	-0.79	0.0130	<i>L. braziliensis</i>	
LbrM05_V2.0660	LinJ05_V3.0670	Unknown function	2.46	0.0000	<i>L. infantum</i>	
LbrM05_V2.0690	LinJ05_V3.0700	Unknown function	0.97	0.0002	<i>L. infantum</i>	SRR
LbrM06_V2.0640	LinJ06_V3.0660	Unknown function	-1.44	0.0493	<i>L. braziliensis</i>	SRR
LbrM06_V2.0710	LinJ06_V3.0750	Unknown function	1.12	0.0194	<i>L. infantum</i>	SRR
LbrM06_V2.0730	LinJ06_V3.0770	Unknown function	-1.45	0.0003	<i>L. braziliensis</i>	SRR
LbrM07_V2.0120	LinJ07_V3.0270	Unknown function	1.74	0.0358	<i>L. infantum</i>	
LbrM07_V2.0550	LinJ07_V3.0540	Unknown function	-0.87	0.0060	<i>L. braziliensis</i>	
LbrM07_V2.0890 - LbrM07_V2.0910	LinJ07_V3.0950 - LinJ07_V3.0990	Unknown function	0.93	0.0109	<i>L. infantum</i>	SRR

LbrM07_V2.0890 -	LinJ07_V3.0950 -						
LbrM07_V2.0910	LinJ07_V3.0990	Unknown function	2.21	0.0000	<i>L. infantum</i>	SRR	
LbrM07_V2.0930	LinJ07_V3.1010	Unknown function	0.98	0.0001	<i>L. infantum</i>	SRR	
LbrM10_V2.1190 <sup>§</sup>	LinJ10_V3.1170	Unknown function	-0.78	0.0470	<i>L. braziliensis</i>		
LbrM10_V2.1250	LinJ10_V3.1230	Unknown function	2.10	0.0209	<i>L. infantum</i>	NMT	
LbrM11_V2.0160	LinJ11_V3.0480	Unknown function	0.80	0.0016	<i>L. infantum</i>		
LbrM13_V2.0690	LinJ13_V3.0770	Unknown function	1.82	0.0000	<i>L. infantum</i>	SRR	
LbrM14_V2.0360	LinJ14_V3.0360	Unknown function	1.14	0.0001	<i>L. infantum</i>		
LbrM14_V2.0480	LinJ14_V3.0470	Unknown function	0.85	0.0053	<i>L. infantum</i>		
LbrM16_V2.1730	not present in geneDB	Unknown function	1.42	0.0270	<i>L. infantum</i>	SRR	
LbrM17_V2.0980	LinJ17_V3.0990	Unknown function	-0.81	0.0094	<i>L. braziliensis</i>		
LbrM18_V2.1250	LinJ18_V3.1160	Unknown function	1.27	0.0093	<i>L. infantum</i>	NMT	
LbrM20_V2.0550	LinJ34_V3.0640	Unknown function	-2.33	0.0045	<i>L. braziliensis</i>	SRR	
LbrM21_V2.0910	LinJ21_V3.0900	Unknown function	-0.95	0.0002	<i>L. braziliensis</i>	SRR	
LbrM21_V2.1080	LinJ21_V3.1070	Unknown function	-0.81	0.0033	<i>L. braziliensis</i>		
LbrM22_V2.1410 <sup>§</sup>	LinJ22.1330	Unknown function	-1.04	0.0000	<i>L. braziliensis</i>		
LbrM24_V2.1380	LinJ24_V3.1530	Unknown function	2.58	0.0052	<i>L. infantum</i>		
LbrM24_V2.1520	LinJ24_V3.1400	Unknown function	0.89	0.0101	<i>L. infantum</i>	NMT	
LbrM25_V2.1390	LinJ25_V3.1910	Unknown function	-1.03	0.0003	<i>L. braziliensis</i>	SRR	
LbrM25_V2.1620	LinJ25_V3.2140	Unknown function	-0.97	0.0019	<i>L. braziliensis</i>	NMT	
LbrM27_V2.2850 <sup>§</sup>	not present in geneDB	Unknown function	1.17	0.0004	<i>L. infantum</i>	SRR	
LbrM29_V2.0120	LinJ29_V3.0110	Unknown function	1.27	0.0001	<i>L. infantum</i>	SRR	
LbrM29_V2.0820	LinJ29_V3.0830	Unknown function	-0.82	0.0001	<i>L. braziliensis</i>	SRR	
LbrM29_V2.2100	not present in geneDB	Unknown function	-0.80	0.0228	<i>L. braziliensis</i>		
LbrM31_V2.0130	LinJ31_V3.0140	Unknown function	0.86	0.0089	<i>L. infantum</i>		

LbrM31_V2.0370 <sup>§</sup>	LinJ31_V3.0280	Unknown function	1.14	0.0386	<i>L. infantum</i>	
LbrM31_V2.1240 <sup>§</sup>	LinJ31_V3.1040	Unknown function	-1.08	0.0013	<i>L. braziliensis</i>	
LbrM31_V2.1670	LinJ31_V3.1470	Unknown function	2.13	0.0063	<i>L. infantum</i>	SRR
LbrM31_V2.2330	LinJ31_V3.2110	Unknown function	-1.38	0.0139	<i>L. braziliensis</i>	SRR
LbrM32_V2.3800	not present in geneDB	Unknown function	-0.87	0.0018	<i>L. braziliensis</i>	
LbrM33_V2.3200	LinJ33_V3.3070	Unknown function	-1.32	0.0001	<i>L. braziliensis</i>	SRR
LbrM35_V2.1250	LinJ36_V3.1180	Unknown function	-0.79	0.0279	<i>L. braziliensis</i>	

### *L. infantum vs L. major*

<i>L.inf</i> GeneDB ID	<i>L.maj</i> GeneDB ID	Product	LogFC	P.Value	Preferentially expressed	Note
LinJ03_V3.0220	LmjF03.0230	Long chain fatty Acyl CoA synthetase,	2.30	0.0000	<i>L. major</i>	NMT
LinJ03_V3.0570	LmjF03.0590	DNA repair helicase	-1.77	0.0019	<i>L. infantum</i>	
LinJ03_V3.0720	LmjF03.0740	Cytochrome c oxidase copper chaperone,	-0.94	0.0092	<i>L. infantum</i>	NMT
LinJ04_V3.0320	LmjF04.0330	Mitochondrial exoribonuclease DSS-1,	1.99	0.0000	<i>L. major</i>	SRR
LinJ04_V3.1180	LmjF04.1165 <sup>§</sup>	31-O-demethyl-FK506 methyltransferase	-1.45	0.0133	<i>L. infantum</i>	
LinJ05_V3.0480	LmjF05.0480	Monocarboxylate transporter-like protein	0.78	0.0444	<i>L. major</i>	
LinJ06_V3.0400 <sup>§</sup>	LmjF06.0400 <sup>§</sup>	Fructose biphosphate aldolase	-0.81	0.0010	<i>L. infantum</i>	
LinJ10_V3.0490 - LinJ10_V3.0530	LmjF10.0460 / LmjF10.0465 / LmjF10.0470 / LmjF10.0480	GP63, leishmanolysin	-1.47	0.0159	<i>L. infantum</i>	SRR
LinJ11_V3.0100	LmjF11.0100	Seryl-tRNA synthetase,	-1.68	0.0039	<i>L. infantum</i>	
LinJ11_V3.0400	LmjF11.0400	Tubulin-tyrsoine ligase-like protein	1.01	0.0003	<i>L. major</i>	SRR
LinJ12_v4.0663	LmjF12.0755	Surface antigen proteins (1 and 2),	1.02	0.0000	<i>L. major</i>	SRR
LinJ12_v4.0666	LmjF12.1070	Surface antigen protein 2	0.80	0.0002	<i>L. major</i>	SRR
LinJ12_v4.0668	LmjF12.0780	Surface antigen protein 2 precursor	0.83	0.0000	<i>L. major</i>	

LinJ12_v4.0671	LmjF12.1090	Surface antigen proteins (1 and 2),	1.38	0.0000	<i>L. major</i>	SRR
LinJ14_V3.1180	LmjF14.1100	Kinesin K39,	-0.95	0.0434	<i>L. infantum</i>	SRR
LinJ16_V30920	LmjF16.0910 <sup>§</sup>	Flagellar calcium binding protein	-1.87	0.0110	<i>L. infantum</i>	
LinJ17_V3.0330	LmjF17.0280	Histone H2A,	-1.42	0.0118	<i>L. infantum</i>	SRR
LinJ20_V3.0970	LmjF20.0960	Protein kinase,	1.86	0.0007	<i>L. major</i>	SSR
LinJ22_V3.1530	LmjF22.1680 <sup>§</sup>	Phosphoinositide-specific phosphatase C	0.86	0.0002	<i>L. major</i>	
LinJ24_V3.0630	LmjF24.0620	Ubiquitin hydrolase,	-1.26	0.0433	<i>L. infantum</i>	
LinJ24_V3.1800	LmjF24.1730	Protein kinase,	-1.15	0.0001	<i>L. infantum</i>	NMT
LinJ27_V3.2490	LmjF27.0510	Cysteine peptidase, Clan CA, family C2,	-1.13	0.0374	<i>L. infantum</i>	SRR
LinJ28_V3.0470	LmjF29.0280	D-lactate dehydrogenase	-0.85	0.0012	<i>L. infantum</i>	
LinJ30_V3.1490	LmjF30.1410	Ama1 protein,	0.79	0.0271	<i>L. major</i>	
LinJ30_V3.2970	LmjF30.2950	Phospholipase c-like protein	-0.88	0.0155	<i>L. infantum</i>	
LinJ31_V3.0860	LmjF31.0830	Triacyglycerol lipase	-0.79	0.0000	<i>L. infantum</i>	
LinJ31_V3.1490	LmjF31.1460	Surface membrane protein gp46-like protein	1.18	0.0353	<i>L. major</i>	SRR
LinJ31_V3.2370	LmjF31.2300	3' nucleotidase/nuclease	-0.79	0.0000	<i>L. infantum</i>	
LinJ32_V3.1900	LmjF32.1810	Protein kinase,	-1.52	0.0235	<i>L. infantum</i>	NMT
LinJ35_V3.0260	LmjF35.0260	GTP-ase activating protein,	0.98	0.0451	<i>L. major</i>	
LinJ35_V3.0500	LmjF35.0500	Proteophosphoglycan ppg3,	1.09	0.0000	<i>L. major</i>	SSR
LinJ35_V3.0520 / LmjF35.0540	LmjF35.0520 / LmjF35.0540	Proteophosphoglycan ppg3,	0.84	0.0000	<i>L. major</i>	SSR
LinJ35_V3.0530 / LmjF35.0540	LmjF35.0520 / LmjF35.0540	Proteophosphoglycan ppg3,	1.24	0.0000	<i>L. major</i>	SSR
LinJ35_V3.0540	LmjF35.0540	Proteophosphoglycan ppg3,	1.73	0.0068	<i>L. major</i>	
LinJ36_V3.5610	LmjF36.5370	Tyrosine specific protein phosphatase	-0.77	0.0036	<i>L. infantum</i>	
LinJ05_V3.0670	LmjF05.0670	Unknown function	2.34	0.0000	<i>L. major</i>	
LinJ05_V3.0690	LmjF05.0690	Unknown function	1.14	0.0183	<i>L. major</i>	SRR
LinJ07_V3.0270	LmjF07.0120	Unknown function	1.55	0.0085	<i>L. major</i>	

LinJ07_V3.0950 - LinJ07_V3.0990	LmjF07.0840	Unknown function	0.80	0.0087	<i>L. major</i>	SRR
LinJ09_V3.1640	LmjF09.1550	Unknown function	-1.02	0.0496	<i>L. infantum</i>	NMT
LinJ10_V3.0790	LmjF10.0740	Unknown function	0.77	0.0028	<i>L. major</i>	
LinJ10_V3.1230	LmjF10.1140	Unknown function	2.73	0.0001	<i>L. major</i>	NMT
LinJ13_V3.0770	LmjF13.0880	Unknown function	1.64	0.0000	<i>L. major</i>	
LinJ14_V3.0470	LmjF14.0470 <sup>§</sup>	Unknown function	0.86	0.0001	<i>L. major</i>	
LinJ15_V3.0160	LmjF15.0160	Unknown function	-1.56	0.0169	<i>L. infantum</i>	SRR
LinJ16_V3.0940	LmjF16.0930	Unknown function	1.34	0.0021	<i>L. major</i>	NMT
LinJ18_V3.1160	LmjF18.1150	Unknown function	0.77	0.0212	<i>L. major</i>	NMT
LinJ19_V3.1270	LmjF19.1280	Unknown function	-1.27	0.0292	<i>L. infantum</i>	NMT
LinJ20_V3.0530	LmjF20.0460	Unknown function	-1.88	0.0062	<i>L. infantum</i>	
LinJ20_V3.0770	LmjF20.0705	Unknown function	1.11	0.0000	<i>L. major</i>	NMT
LinJ20_V3.1200 <sup>§</sup>	LmjF20.1175 <sup>§</sup>	Unknown function	0.80	0.0316	<i>L. major</i>	
LinJ22_V3.0070	LmjF22.0190	Unknown function	-0.83	0.0013	<i>L. infantum</i>	
LinJ23_V3.0100	LmjF23.0090	Unknown function	-0.92	0.0447	<i>L. infantum</i>	SRR
LinJ24_V3.0210	LmjF24.0220	Unknown function	-1.68	0.0078	<i>L. infantum</i>	
LinJ24_V3.1530	LmjF24.1470	Unknown function	2.70	0.0001	<i>L. major</i>	
LinJ25_V3.1150	LmjF25.1110	Unknown function	-2.63	0.0000	<i>L. infantum</i>	SRR
LinJ26_V3.0390	LmjF26.0400	Unknown function	-1.46	0.0049	<i>L. infantum</i>	
LinJ26_V3.1420	LmjF26.1440	Unknown function	-1.97	0.0057	<i>L. infantum</i>	NMT
LinJ29_V3.0110	LmjF29.0110	Unknown function	0.95	0.0000	<i>L. major</i>	SRR
LinJ29_V3.0870	LmjF29.0830	Unknown function	1.48	0.0013	<i>L. major</i>	SRR
LinJ31_V3.1090	LmjF31.1090	Unknown function	-1.80	0.0005	<i>L. infantum</i>	
LinJ31_V3.1430	LmjF31.1400	Unknown function	-0.80	0.0385	<i>L. infantum</i>	NMT
LinJ31_V3.1470	LmjF31.1440	Unknown function	1.05	0.0000	<i>L. major</i>	SRR
LinJ31_V3.1470	LmjF31.1440	Unknown function	1.26	0.0000	<i>L. major</i>	SRR

LinJ31_V3.1470	LmjF31.1440	Unknown function	2.52	0.0000	<i>L. major</i>	SRR
LinJ31_V3.2550	not present in GeneDB	Unknown function	-0.99	0.0067	<i>L. infantum</i>	
LinJ31_V3.2750	LmjF31.2670	Unknown function	-1.77	0.0167	<i>L. infantum</i>	SRR
LinJ31_V3.3110	LmjF31.3000	Unknown function	-1.35	0.0098	<i>L. infantum</i>	
LinJ32_V3.0220	LmjF32.0210	Unknown function	-1.43	0.0263	<i>L. infantum</i>	SRR
LinJ33_V3.2120	LmjF33.2000	Unknown function	0.82	0.0277	<i>L. major</i>	SRR
LinJ33_V3.3070	LmjF33.2910	Unknown function	-0.84	0.0002	<i>L. infantum</i>	SRR
LinJ34_V3.0740	LmjF34.0705	Unknown function	-1.08	0.0435	<i>L. infantum</i>	
LinJ36_V3.4360	LmjF36.4150	Unknown function	-2.30	0.0002	<i>L. infantum</i>	
LinJ36_V3.4520	LmjF36.4310	Unknown function	-1.70	0.0065	<i>L. infantum</i>	

<sup>§</sup>annotated as a pseudogene in GeneDB

Note: NMT, N-myristoyl transferase target genes; SRR, sequence repeat region (see Depledge et al 2007, ref 22)