

Supplementary Table 4: LINE enrichment within Segmental Duplications by LINE Family and Subfamily.

## Duplication Analysis and Enrichment

Repeat Family	Repeat Subfamily	Consensus Divergence	WSSD+WGAC			WSSD			WGAC >10k94%			Genome Average	
			bp	Fraction	Enrichment	bp	Fraction	Enrichment	bp	Fraction	Enrichment	bp	Fraction
CR1	L3	33.5%	24,221	0.014%	0.3	20,009	0.014%	0.3	17,824	0.015%	0.3	1,155,292	0.045%
CR1	L3b	24.4%	4,574	0.003%	0.4	4,353	0.003%	0.4	3,214	0.003%	0.3	199,708	0.008%
CR1	L3_Mars	17.3%	18,835	0.011%	0.5	14,821	0.011%	0.5	15,105	0.012%	0.6	533,300	0.021%
L1	HAL1	32.6%	17,494	0.010%	0.3	15,461	0.011%	0.3	12,172	0.010%	0.3	891,157	0.035%
L1	HAL1b	28.3%	1,397	0.001%	0.2	1,266	0.001%	0.2	131	0.000%	0.0	131,547	0.005%
L1	L1M	37.8%	24,184	0.014%	0.7	22,012	0.016%	0.7	15,368	0.013%	0.6	542,320	0.021%
L1	L1M1	24.4%	22,480	0.013%	0.7	15,208	0.011%	0.6	17,890	0.015%	0.8	490,818	0.019%
L1	L1M2	24.7%	227,239	0.136%	0.6	190,419	0.135%	0.6	144,474	0.119%	0.6	5,366,686	0.209%
L1	L1M2a	35.9%	4,391	0.003%	1.1	3,702	0.003%	1.1	3,865	0.003%	1.3	62,891	0.002%
L1	L1M2a1	22.2%	0	0.000%	0.0	0	0.000%	0.0	0	0.000%	0.0	1,042	0.000%
L1	L1M2b	28.1%	0	0.000%	0.0	0	0.000%	0.0	0	0.000%	0.0	4,981	0.000%
L1	L1M2c	8.3%	2,836	0.002%	0.4	2,836	0.002%	0.4	1,559	0.001%	0.3	118,465	0.005%
L1	L1M3	25.6%	73,942	0.044%	0.5	64,546	0.046%	0.5	57,919	0.048%	0.6	2,166,086	0.084%
L1	L1M3a	33.2%	0	0.000%	0.0	0	0.000%	0.0	0	0.000%	0.0	18,242	0.001%
L1	L1M3b	32.3%	4,533	0.003%	2.3	2,619	0.002%	1.6	3,351	0.003%	2.4	29,808	0.001%
L1	L1M3c	29.4%	2,774	0.002%	0.5	2,652	0.002%	0.6	852	0.001%	0.2	77,546	0.003%
L1	L1M3d	31.1%	294	0.000%	0.1	294	0.000%	0.1	196	0.000%	0.1	37,968	0.001%
L1	L1M3de	6.2%	488	0.000%	0.2	488	0.000%	0.2		0.000%	0.0	47,591	0.002%
L1	L1M3e	22.9%	22,477	0.013%	2.4	18,466	0.013%	2.4	4,152	0.003%	0.6	141,398	0.006%
L1	L1M3f	28.7%	40	0.000%	0.0	40	0.000%	0.1	40	0.000%	0.1	13,955	0.001%
L1	L1M4	23.9%	91,626	0.055%	0.4	75,136	0.053%	0.4	56,491	0.047%	0.4	3,212,963	0.125%
L1	L1M4b	28.7%	17,550	0.010%	0.4	15,780	0.011%	0.4	6,758	0.006%	0.2	766,347	0.030%
L1	L1M4c	28.7%	17,826	0.011%	0.3	14,346	0.010%	0.3	7,292	0.006%	0.1	1,043,288	0.041%
L1	L1M5	29.0%	69,395	0.041%	0.3	50,326	0.036%	0.2	37,484	0.031%	0.2	4,236,156	0.165%
L1	L1MA10	26.8%	9,064	0.005%	0.8	8,315	0.006%	0.8	7,621	0.006%	0.9	183,991	0.007%
L1	L1MA4	33.0%	46,442	0.028%	0.4	32,193	0.023%	0.3	29,004	0.024%	0.3	1,796,308	0.070%
L1	L1MA4A	31.2%	19,305	0.012%	0.4	15,688	0.011%	0.4	11,875	0.010%	0.4	676,157	0.026%
L1	L1MA5	22.4%	25,828	0.015%	0.3	19,919	0.014%	0.3	14,630	0.012%	0.3	1,234,334	0.048%
L1	L1MA5A	26.5%	15,221	0.009%	0.7	14,714	0.010%	0.8	12,159	0.010%	0.7	347,079	0.014%
L1	L1MA6	26.0%	35,467	0.021%	0.3	27,702	0.020%	0.3	21,861	0.018%	0.3	1,808,152	0.070%
L1	L1MA7	31.0%	18,684	0.011%	0.4	10,418	0.007%	0.2	12,410	0.010%	0.3	816,184	0.032%
L1	L1MA8	25.8%	20,050	0.012%	0.3	12,802	0.009%	0.2	13,560	0.011%	0.3	1,017,287	0.040%
L1	L1MA9	33.5%	21,804	0.013%	0.3	16,765	0.012%	0.3	14,389	0.012%	0.3	1,161,119	0.045%
L1	L1MB1	24.3%	24,914	0.015%	0.6	22,210	0.016%	0.7	18,695	0.015%	0.7	603,804	0.024%
L1	L1MB2	27.5%	13,425	0.008%	0.3	8,722	0.006%	0.2	10,151	0.008%	0.3	707,341	0.028%
L1	L1MB3	27.3%	24,586	0.015%	0.3	17,651	0.013%	0.3	15,215	0.013%	0.3	1,283,238	0.050%
L1	L1MB4	26.4%	11,518	0.007%	0.3	9,909	0.007%	0.3	5,454	0.005%	0.2	673,214	0.026%
L1	L1MB5	26.1%	31,007	0.019%	0.5	27,000	0.019%	0.6	24,378	0.020%	0.6	876,639	0.034%
L1	L1MB7	29.7%	30,388	0.018%	0.3	24,452	0.017%	0.3	21,846	0.018%	0.3	1,756,375	0.068%
L1	L1MB8	23.4%	33,839	0.020%	0.4	30,000	0.021%	0.4	18,363	0.015%	0.3	1,468,841	0.057%
L1	L1MC	30.9%	47,409	0.028%	0.4	31,330	0.022%	0.3	28,974	0.024%	0.3	1,774,397	0.069%
L1	L1MC1	27.2%	37,655	0.022%	0.4	31,485	0.022%	0.4	22,524	0.019%	0.3	1,618,377	0.063%

L1	L1MC2	29.9%	11,619	0.007%	0.3	8,634	0.006%	0.3	6,772	0.006%	0.2	612,260	0.024%
L1	L1MC3	26.8%	22,748	0.014%	0.2	21,800	0.015%	0.3	10,473	0.009%	0.1	1,523,527	0.059%
L1	L1MC4	25.8%	26,068	0.016%	0.3	21,989	0.016%	0.3	17,109	0.014%	0.3	1,177,293	0.046%
L1	L1MC4a	27.7%	15,627	0.009%	0.3	14,719	0.010%	0.4	11,210	0.009%	0.3	734,271	0.029%
L1	L1MC4_3e	31.3%	3,136	0.002%	0.2	1,420	0.001%	0.1	2,322	0.002%	0.3	193,428	0.008%
L1	L1MC5	22.0%	10,336	0.006%	0.3	6,812	0.005%	0.2	6,922	0.006%	0.3	537,491	0.021%
L1	L1MCa	31.3%	39,820	0.024%	0.6	32,604	0.023%	0.6	30,408	0.025%	0.6	1,034,796	0.040%
L1	L1MCb	26.9%	3,057	0.002%	0.2	3,057	0.002%	0.2		0.000%	0.0	238,960	0.009%
L1	L1MCc	30.0%	2,424	0.001%	0.2	2,424	0.002%	0.3	1,023	0.001%	0.1	166,187	0.006%
L1	L1MD	27.7%	69,459	0.041%	0.6	53,977	0.038%	0.6	47,420	0.039%	0.6	1,708,725	0.067%
L1	L1MD1	23.1%	11,343	0.007%	0.3	9,361	0.007%	0.3	7,343	0.006%	0.2	649,724	0.025%
L1	L1MD2	30.2%	23,237	0.014%	0.4	19,330	0.014%	0.4	18,757	0.016%	0.5	800,674	0.031%
L1	L1MD3	28.7%	17,533	0.010%	0.4	16,362	0.012%	0.5	16,675	0.014%	0.5	660,717	0.026%
L1	L1MDa	29.8%	14,724	0.009%	0.2	9,790	0.007%	0.2	9,393	0.008%	0.2	1,137,291	0.044%
L1	L1MDb	24.6%	3,893	0.002%	0.3	3,370	0.002%	0.3	1,481	0.001%	0.2	195,735	0.008%
L1	L1Md_A	12.8%	5,987,068	3.575%	2.4	5,469,872	3.885%	2.6	3,121,264	2.582%	1.7	38,700,166	1.507%
L1	L1Md_F	16.6%	4,325,192	2.583%	3.4	4,097,078	2.910%	3.8	2,118,430	1.752%	2.3	19,406,213	0.756%
L1	L1Md_F2	8.1%	9,210,597	5.500%	2.4	8,520,664	6.052%	2.7	4,616,541	3.818%	1.7	58,592,346	2.282%
L1	L1Md_F3	4.3%	2,096,644	1.252%	2.9	1,958,136	1.391%	3.2	1,311,616	1.085%	2.5	11,173,159	0.435%
L1	L1Md_Gf	7.5%	1,745,516	1.042%	2.1	1,628,529	1.157%	2.3	1,042,186	0.862%	1.7	12,935,270	0.504%
L1	L1Md_T	2.2%	4,400,088	2.627%	2.1	3,913,591	2.780%	2.2	2,283,969	1.889%	1.5	32,443,213	1.264%
L1	L1ME1	35.7%	13,321	0.008%	0.2	11,984	0.009%	0.2	4,167	0.003%	0.1	1,316,313	0.051%
L1	L1ME2	29.9%	7,120	0.004%	0.1	5,988	0.004%	0.1	3,940	0.003%	0.1	787,416	0.031%
L1	L1ME3	29.0%	6,210	0.004%	0.3	5,117	0.004%	0.3	2,587	0.002%	0.2	286,367	0.011%
L1	L1ME3A	30.5%	7,064	0.004%	0.2	5,749	0.004%	0.2	1,640	0.001%	0.1	487,597	0.019%
L1	L1ME3B	18.6%	8,167	0.005%	0.3	7,949	0.006%	0.4	5,100	0.004%	0.3	359,442	0.014%
L1	L1ME4a	12.9%	1,794	0.001%	0.1	1,070	0.001%	0.1	1,091	0.001%	0.1	334,657	0.013%
L1	L1MEa	31.5%	3,362	0.002%	0.7	3,067	0.002%	0.7	3,031	0.003%	0.9	74,877	0.003%
L1	L1MEb	29.7%	959	0.001%	0.1	537	0.000%	0.1	422	0.000%	0.1	167,592	0.007%
L1	L1MEc	29.8%	24,911	0.015%	0.2	20,331	0.014%	0.2	7,783	0.006%	0.1	1,606,639	0.063%
L1	L1MEd	35.2%	4,950	0.003%	0.3	4,132	0.003%	0.3	3,825	0.003%	0.3	272,095	0.011%
L1	L1MEe	27.6%	4,817	0.003%	0.2	2,689	0.002%	0.1	4,005	0.003%	0.2	391,570	0.015%
L1	L1P5	29.7%	6,938	0.004%	1.3	6,291	0.004%	1.4	1,771	0.001%	0.5	81,975	0.003%
L1	L1PB4	29.5%	402	0.000%	0.1	273	0.000%	0.1	129	0.000%	0.1	50,719	0.002%
L1	L1VL1	9.0%	1,229,265	0.734%	3.3	1,123,796	0.798%	3.6	710,983	0.588%	2.7	5,686,890	0.222%
L1	L1VL2	26.8%	687,465	0.410%	1.9	606,611	0.431%	2.0	514,943	0.426%	2.0	5,407,455	0.211%
L1	L1VL4	9.4%	565,916	0.338%	1.3	490,360	0.348%	1.3	325,335	0.269%	1.0	6,914,322	0.269%
L1	L1_Mm	8.1%	1,953,564	1.166%	3.1	1,739,660	1.236%	3.3	1,388,120	1.148%	3.1	9,520,951	0.371%
L1	L1_Mur1	11.0%	969,946	0.579%	2.0	875,727	0.622%	2.1	651,843	0.539%	1.8	7,557,192	0.294%
L1	L1_Mur2	17.6%	1,586,305	0.947%	2.2	1,421,276	1.010%	2.4	1,222,017	1.011%	2.4	10,994,929	0.428%
L1	L1_Mur3	30.1%	1,260,020	0.752%	1.4	1,122,509	0.797%	1.5	658,229	0.544%	1.0	13,933,093	0.543%
L1	L1_Mus1	8.0%	3,697,651	2.208%	2.8	3,532,589	2.509%	3.2	2,142,577	1.772%	2.3	20,210,954	0.787%
L1	L1_Mus2	5.8%	1,395,636	0.833%	1.7	1,242,888	0.883%	1.8	871,635	0.721%	1.4	12,908,800	0.503%
L1	L1_Mus3	10.2%	2,324,127	1.388%	2.1	2,039,563	1.449%	2.2	1,858,631	1.537%	2.3	16,959,551	0.661%
L1	L1_Mus4	9.4%	744,032	0.444%	1.5	664,591	0.472%	1.6	553,709	0.458%	1.5	7,599,553	0.296%
L1	L1_Rod	22.7%	254,923	0.152%	0.9	194,523	0.138%	0.8	172,120	0.142%	0.8	4,309,773	0.168%

L1	Lx	10.7%	1,268,539	0.757%	1.3	1,060,551	0.753%	1.3	943,523	0.780%	1.3	15,009,563	0.585%
L1	Lx2	2.2%	808,681	0.483%	1.2	725,681	0.515%	1.3	591,232	0.489%	1.3	9,959,741	0.388%
L1	Lx2A	11.1%	52,057	0.031%	1.0	35,979	0.026%	0.8	35,747	0.030%	0.9	820,845	0.032%
L1	Lx2A1	12.4%	180,336	0.108%	2.0	161,888	0.115%	2.1	140,810	0.116%	2.1	1,399,417	0.055%
L1	Lx2B	14.3%	657,346	0.393%	1.3	580,682	0.412%	1.4	504,130	0.417%	1.4	7,627,446	0.297%
L1	Lx3A	11.9%	573,722	0.343%	1.7	506,337	0.360%	1.8	460,160	0.381%	1.9	5,087,926	0.198%
L1	Lx3B	13.4%	294,965	0.176%	1.4	244,680	0.174%	1.4	222,700	0.184%	1.5	3,192,882	0.124%
L1	Lx3C	11.3%	379,198	0.226%	1.2	325,766	0.231%	1.2	290,165	0.240%	1.2	5,054,136	0.197%
L1	Lx3_Mus	8.1%	622,000	0.371%	1.2	529,166	0.376%	1.2	381,676	0.316%	1.0	7,892,819	0.307%
L1	Lx4A	12.8%	591,540	0.353%	1.5	521,740	0.371%	1.6	469,113	0.388%	1.7	5,890,360	0.229%
L1	Lx4B	16.3%	607,949	0.363%	1.6	538,721	0.383%	1.7	472,025	0.390%	1.7	5,905,839	0.230%
L1	Lx5	17.6%	1,444,046	0.862%	1.4	1,298,608	0.922%	1.5	1,163,014	0.962%	1.5	16,283,419	0.634%
L1	Lx6	18.1%	937,393	0.560%	1.1	842,172	0.598%	1.2	689,857	0.571%	1.1	13,096,450	0.510%
L1	Lx7	18.2%	885,722	0.529%	0.8	724,922	0.515%	0.8	634,291	0.525%	0.8	16,304,371	0.635%
L1	Lx8	30.7%	912,841	0.545%	0.6	736,570	0.523%	0.6	640,942	0.530%	0.6	22,339,318	0.870%
L1	Lx9	26.8%	587,308	0.351%	0.5	472,514	0.336%	0.5	362,379	0.300%	0.4	17,689,410	0.689%
L1	MusHAL1	12.2%	737,590	0.440%	2.5	567,635	0.403%	2.3	554,387	0.459%	2.6	4,483,245	0.175%
L2	L2	25.9%	196,964	0.118%	0.3	159,278	0.113%	0.3	146,854	0.121%	0.3	9,459,802	0.368%
RTE	L4	19.1%	7,952	0.005%	0.2	6,629	0.005%	0.2	4,688	0.004%	0.2	498,804	0.019%
Total			57,660,345	34.429%	1.7	51,878,363	36.849%	1.8	35,207,886	29.121%	1.4	521,930,353	20.330%

\*LINE family and subfamily designation and average divergence from the consensus (a surrogate for evolutionary age) as defined by RepeatMasker. Enrichment was computed based on comparison against the genome average for total number of LINE basepairs.