

Supplemental Data - Table 1**Categories**

- 1** < 40 My
- 2** 40 - 63 My - Anthropoid-Specific
- 3** 64 - 80 My - Primate-Specific
- 4** > 80 My - Eutherian-Specific

Category	RepName	Corrected Age (My)	% Div (excluding CpGs)*
1	L1HS	10	0.9
1	L1PA2	13	1.1
1	AluY	16	3.3
1	L1PA3	19	1.8
1	AluSc	22	5.0
1	AluSg1	23	4.3
1	AluSg	23	5.7
1	L1PA4	25	2.5
1	AluSq	25	6.6
1	AluSx	28	7.9
1	L1PA5	31	3.3
2	MER85	37	4.6
1	L1PA6	40	4.9
2	L1PA8	42	6.0
2	AluJb	42	17.3
2	MER107	43	6.0
2	MER75B	44	6.6
2	AluJo	44	14.7
1	L1PA7	45	5.9
2	MADE1	46	7.5
2	MER30	46	7.0
2	HSMAR1	48	7.9
2	MER75	48	8.5
3	L1MA2	49	19.1
2	L1PA8A	50	10.6
3	L1MA3	51	21.7
2	L1PA10	51	11.2
2	Charlie3	51	8.7
3	L1PA15	53	16.2
3	L1PA16	53	17.4
2	MER1A	53	9.3
2	L1PB1	54	10.1
2	L1PA11	55	11.1
3	L1PB3	57	15.8
3	HSMAR2	57	14.8
3	Tigger1	59	14.8
2	MER30B	60	7.7
2	L1PA14	60	10.9
3	Tigger3b	61	10.9
3	Tigger2	61	16.7
2	MER1B	61	11.8
3	Tigger4(Zombi)	62	10.0

3 MER46B	63	17.0
2 L1PA13	63	8.6
2 L1MA1	63	11.9
3 MER44A	64	13.0
2 L1PB2	64	7.5
3 Tigger2a	64	16.7
3 Tigger3(Golem)	64	10.7
4 MER53	65	21.2
3 Tigger5a	65	16.1
3 Ricksha_c	66	18.8
3 MER46A	66	15.0
3 MER6	66	14.5
3 MER6A	67	15.2
3 MER44C	68	15.0
3 Tigger7	69	12.1
2 L1PA12	70	11.2
4 Tigger6b	70	21.7
3 Ricksha_b	70	29.7
3 Tigger5	70	19.0
4 MER96B	70	20.1
3 MER44D	70	18.0
3 Ricksha	71	13.4
3 MER6C	71	22.2
3 MER2B	71	18.5
4 Charlie5	72	23.2
3 MER44B	72	17.0
4 MER58D	72	26.1
4 MER33	72	25.0
4 Tigger6	73	25.9
4 MER45	73	21.0
3 Tigger5b	73	18.2
4 MER3	73	24.5
4 Tigger6a	73	26.7
4 MER45A	73	21.2
4 MER58	74	24.2
4 MER58B	74	18.3
3 MER2	75	22.9
4 MER45B	75	26.1
4 Cheshire	75	30.3
4 MER58A	75	23.1
3 MER8	76	17.2
4 MER45R	76	26.6
3 MER6B	76	18.9
3 MER82	76	19.0
4 Charlie1	77	29.3
4 Looper	77	31.3
4 ORSL	77	25.9
4 Charlie1b	77	30.9
4 MADE2	77	23.3
4 MER20	77	15.5
4 MER63B	77	26.4
3 Tigger5c	78	21.6

4 Charlie1a	78	29.1
4 MER63D	78	26.6
4 MER119	79	29.2
4 MER63C	80	29.7
4 MER106B	80	29.4
4 MER106A	82	21.9
4 MER96	83	23.9
4 MER105	83	20.3
4 MER99	83	24.0
4 MER58C	83	25.9
4 MER63	83	30.0
4 MER97a	84	19.7
4 MER97b	84	32.1
4 Charlie4a	85	33.0
4 MER91	85	38.3
4 MER5A1	86	20.4
4 MER5C	86	33.5
4 Charlie6	86	34.2
4 Charlie4	87	33.3
4 MER97c	87	24.7
4 Charlie9	87	39.8
4 MER104	87	26.6
4 MER81	87	25.5
4 Zaphod2	87	20.7
4 Charlie10	88	35.8
4 Zaphod	88	34.3
4 Arthur1	89	37.4
4 MER69A	90	31.8
4 MER63A	90	43.6
4 Kanga1	92	39.2
4 Kanga1c	92	30.0
4 MER112	92	39.8
4 Charlie2a	92	39.1
4 BLACKJACK	92	38.9
4 Charlie2	93	35.0
4 FordPrefect	94	42.4
4 MER45C	94	20.5
4 MER69B	94	34.9
4 MER94	94	38.5
4 MER46C	95	36.9
4 MER5A	96	77.3
4 Kanga1a	96	42.0
4 Charlie7	96	27.4
4 MER91B	97	40.9
4 Kanga1b	97	33.1
4 MER103	97	39.4
4 MER113	97	36.9
4 Kanga2_a	98	41.9
4 L1PB4	98	30.8
4 MER20B	98	42.7
4 FordPrefect_a	98	57.5
4 MER91C	100	25.6

4 L1PA17	100	68.6
4 L1MA5	101	28.2
4 Charlie2b	101	45.7
4 Charlie8	101	40.5
4 L1MA4	101	34.6
4 MER5B	101	53.0
4 Tigger8	106	29.1
4 MER115	106	42.3
4 MER102b	106	65.4
4 MER91A	107	45.8
4 MER102a	107	72.6
4 MER117	111	33.2
4 MARNA	111	46.2

*% Divergence was calculated using PAML 3.15. The REV model was used for the calculations.