

Additional File 3

Orangutan Chr 21: 23655135-23655823

```
>ponAbe2_dna range=chr21:23655135-23655823 5'pad=200 3'pad=200 strand=+
repeatMasking=lower
ATGAAAAAACCCCTGCATAGTCATTAGGTGAGAGAAGAAATTCAGAACACC
ATGTCTTCACTCTGTATGTGTACATCCTGGAGATGAAGAATTATAGATTA
AAAAACCAAATTAATAATTTTGTATAACAAAATGAGACACTA
CCATCACTTTTTGAGACACTTACATGTATGTCAACCAAAAAGCAAAGCCC
ggcggggcgcggtggctcacgcctgtaatcccagcactttgggaggccga
ggcggggcggatcacgaggtcaggagatcgagatcatcctggctaacacgg
tgaaaccccgctctactaaaaatacaaaaaattagcctggcgaggtggc
gggcgcctgtagtcccagctactcgggaggctgaggcaggagaatggcgt
gaaccaggggggcggagcctgcaatgagctgagatcgcgccactgcactc
cagcctgggcgatagcgagcctccgtctcaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaacaaaaaGCAAAGCCCAATTTTTCTTCCCATA
CAACAGACTATCACATAAACTCTGCCCTGTGAGGGCCAGGCCATCTAAT
TACAGCATTGCAGCTATCACAACTAAGCCAAGTTTCTCAGGAGACAAAA
GCCACCTGTTTCTAGCCACACAATTAAGCCATGTAAACA
```

SW score	perc div.	perc del.	perc ins.	perc query sequence	query	position in query	begin	end	(left)	matching repeat	repeat class/family	position in repeat	begin	end	(left)	ID
2778	2.3	0.3	0.0	ponAbe2_dna	201	506	(183)	+	AluYf4	SINE/Alu	1	307	(5)	1		Not in human or chimp

Orangutan Chr 2b: 3809176-3809864

```
>ponAbe2_dna range=chr2b:3809176-3809864 5'pad=200 3'pad=200 strand=+
repeatMasking=lower
atatattatatacatatataatataatataatataatataatataatata
catatataatataatataatataatataatataatataatataatataatata
agttttacatttatagaaaagttttccaaaagagcttatgagtatagcaca
gagtttgcccacactcctcacgcatttctcttgcattataacatctttatac
ggcggggcgcggtggctcacgcctgtaatcccagcactttgggaggccga
ggcggggcggatcacgaggtcaggagatcgagatcatcctggctaacacgg
tgaaaccccgctctactaaaaacacaaaaattagcctggcgaggtggc
gggcgcctgtagtcccagctactcgggaggctgaggcaggagaatggcgt
gaaccaggggggcggagcctgcagtgagctgagatcgcgccactgcactc
cagcctgggcgatagcgagcctccgtctcaaaaaaaaaaaaaaaaaaaaa
aaaaaaatctttatactactatggtacatttgtcatgactaattcaccagt
attggtacatcattattagtaactcaactccatactttgttcacatttcc
ttagtttttccttaagtgcctttttctgtttcaagatcttatccaaatga
ccacattccatttagtggtcatatctccttattctcttt
```

SW score	perc div.	perc del.	perc ins.	perc query sequence	query	position in query	begin	end	(left)	matching repeat	repeat class/family	position in repeat	begin	end	(left)	ID
285	5.8	5.8	0.0	ponAbe2_dna	28	79	(610)	+	(TA)n	Simple_repeat	2	56	(0)	1		
1030	20.1	2.0	8.0	ponAbe2_dna	80	200	(489)	C	L1MC3	LINE/L1	(7)	7778	7666	2		
2770	2.6	0.3	0.0	ponAbe2_dna	201	507	(182)	+	AluYf4	SINE/Alu	1	308	(4)	3		
1030	20.1	2.0	8.0	ponAbe2_dna	508	688	(1)	C	L1MC3	LINE/L1	(120)	7665	7493	2		

Not in human or chimp

Orangutan Chr 17: 56932516-56933204

```
>ponAbe2_dna range=chr17:56932516-56933204 5'pad=200 3'pad=200 strand=+
repeatMasking=lower
CTGGTCCTTGCTTTGCTGTCTTTGGAGGCCTACTCCAGTTGCTTTTTTTTT
TTTTCCAAGCAAGTTTTTACAACAAGGAGATACCCAAAAGAAAATTCTC
CAAGACAGGAATGCTTCCAAATTGTATTTCGGTACAAAATGCTGTTGAACG
GCTCTACCTTTAGAAAGGACGCAGAAGCACTGGCATTAAAACCCCCTTTCG
ggccgggcgcggtggctcacgcctgtaatcccagcactttgggaggccga
ggcggggcgatcacgaggtcaggagatcgagatcatcctggctaacacgg
tgaaaccccgctctactaaaaatacaaaaaattagcctggcgaggtggc
ggcgccctgtagtcccagctactcgggaggctgaggcaggagaatggcgt
gaaccacggggggcgagcctgcagtgagctgagatcgcgccactgcactc
cagcctgggcgatagcgagcctccgtctcaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaCCCCCTTTCGGTGCACGGGGAGGGCCTGGGGCCTTGGATCTA
CCCGAGGGTTTTACGCTCCTCCAGACCCTATCAACAGCCTCACTAGGAAC
GTGGACGGTGGCAGACAGGAGCCCTGCCCTGGGGAGCCAAAAACTCCAC
CAGGCAATTGTCCCAGGTCTGATGAGAAGGTGTAGACACA
```

```
SW perc perc perc query position in query matching repeat position in repeat
score div. del. ins. sequence begin end (left) repeat class/family begin end (left) ID
2820 1.9 0.3 0.0 ponAbe2_dna 201 509 (180) + AluYf4 SINE/Alu 1 310 (2) 1
Not in human or chimp
```

Table S2. Number of non-diagnostic random mutations versus allele frequency

CHR	START	END	Distribution	Freq.	CpG	non-CpG
12	90005006	90005295	Poly S/B	0.5405	1	0
13	109637257	109637546	Poly Sumatran-specific	0.2027	2	0
17	56932716	56933004	Poly Sumatran-specific	0.0811	0	0
21	23655335	23655623	Poly Sumatran-specific	0.0946	0	1
2b	3809376	3809664	Poly Sumatran-specific	0.3513	0	2
17	18571864	18572153	Orangutan specific	1.0000	6	1
4	170477976	170478265	Orangutan specific	1.0000	2	5