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+-----+-----+-----+-----+-----+-----+
Domestic (A) L N K K S K K I S R K E A E K K R S
CTGAACAAGAAATCCAAAAAGATCAGCAGAAAAGAGGCGGAAAAGAAGAGATCT
Domestic (a) A E Q E I Q K D Q Q K R G G K E E I
CTGAACAAGAAATCCAAAAAGATCAGCAGAAAAGAGGCGGAAAAGAAGAGATCT
Leopard Cat (APbe) L N K K S K K I S R K E A E K K R S
CTGAACAAGAAATCCAAAAAGATCAGCAGAAAAGAGGCGGAAAAGAAGAGATCT
Serval (ALse) L N K K S K K I S R K E A E K K R S
CTGAACAAGAAATCCAAAAAGATCAGCAGAAAAGAGGCGGAAAAGAAGAGATCT

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217 270

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+-----+-----+-----+-----+-----+-----+
Domestic (A) S K K K A S M K N V A Q P R R P R P
TCCAAGAAAAAGGCTTCGATGAAGAATGTTGCTCAGCCTCGGCGGCCCGGCCT
Domestic (a) F Q E K G F D E E C C S A S A A P A
TCCAAGAAAAAGGCTTCGATGAAGAATGTTGCTCAGCCTCGGCGGCCCGGCCT
Leopard Cat (APbe) S K K K A S M K N V A R P R R P R P
TCCAAGAAAAAGGCTTCGATGAAGAACGTTGCTCGGCCTCGGCGGCCCGGCCT
Serval (ALse) S K K K A S M K N V A R P R R P R P
TCCAAGAAAAAGGCTTCGATGAAGAATGTTGCTCGGCCTCGGCGGCCCGGCCT

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271 324

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Domestic (A) P P P A P C V A T R D S C K P P A P
CCGCCGCCCGCCCCCTGCGTGGCCACTCGTGACAGCTGCAAGCCGCCGGCGCCC
Domestic (a) S A A R P L R G H S X
CCGCCGCCCGCCCCCTGCGTGGCCACTCGTGACAGCTGCAAGCCGCCGGCGCCC
Leopard Cat P P P A P C V A T R G S C K P P A P
CCGCCGCCCGCCCCCTGCGTGGCCACTCGAGGCAGCTGCAAGCCGCCGGCGCCC
Serval (ALse) P P P A P C V A T R D S C K P P A P
CCGCCGCCCGCCCCCTGCGTGGCCACTCGTGACAGCTGCAAGCCGCCGGCGCCC

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325 378

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+-----+-----+-----+-----+-----+-----+
Domestic (A) A C C D P C A S C Q C R F F R S S C
GCCTGCTGCGACCCGTGCGCCTCCTGCCAGTGCCGCTTCTTCCGCAGCTCCTGC
Domestic (a) GCCTGCTGCGACCCGTGCGCCTCCTGCCAGTGCCGCTTCTTCCGCAGCTCCTGC
A C C D P C A S C Q C R F F R S S C
Leopard Cat (APbe) GCCTGCTGCGACCCGTGCGCCTCCTGCCAGTGCCGCTTCTTCCGCAGCTCCTGC
A C C D P C A S C Q C R F F R S S C
Serval (ALse) GCCTGCTGCGACCCGTGCGCCTCCTGCCAGTGCCGCTTCTTCCGCAGCTCCTGC
A C C D P C A S C Q C R F F R S S C

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379 408

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+-----+-----+-----+
Domestic (A) S C R V L N P T C X
TCCTGCCGAGTGCTCAACCCACCTGCTGA
Domestic (a) TCCTGCCGAGTGCTCAACCCACCTGCTGA
S C R V L N P T C X
Leopard Cat (APbe) TCCTGCCGAGTGCTCAACCCACATGCTGA
S C R V L N P T C X
Serval (ALse) TCCTGCCGAGTGCTCAACCCACCTGCTGA
S C R V L N P T C X

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Table S1. *ASIP* genotypes of individual cats.

N	Sample	Reported Breed or Species	Declared Phenotype	Alleles	Intron 1		Exon 2										
					c.1-25 C>T	c.1-16_1-17 insC	c.8T >C	c.12 C>T	c.41G >C C14S C>T		c.63 C>T	c.110 G>A	c.111 G>A	c.123_124d elCA	c.127 A>G	c.142 T>C S48P	c.150 C>T
Wild felids																	
1	Pbe 13	<i>Prionailurus b. ber.</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	T/T	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
2	Pbe 14	<i>Prionailurus b. ber.</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
3	Pbe 44	<i>Prionailurus b. ber.</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
4	Pbe 78	<i>Prionailurus b. ber.</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	T/T	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
5	A44041	<i>Prionailurus b. ber.</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$					C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
6	Pbe 30	<i>P.b. euphilura</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
7	Pbe 31	<i>P.b. euphilura</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
8	Pbe 32	<i>P.b. euphilura</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
9	Pbe 53	<i>P.b. euphilura</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
10	Pbe 54	<i>P.b. euphilura</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
11	Pbe 55	<i>P.b. euphilura</i>	Spotted tabby	$A^{Pbe} A^{Pbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
12	CAT24897	<i>Leptailurus serval</i>	Spotted tabby	$A^{Lse} A^{Lse}$		+/+	T/T	C/C	C/C	T/T	G/G	G/G	-/-	A/A	C/C	C/C	T/T
13	CAT42657	<i>Leptailurus serval</i>	Spotted tabby	$A^{Lse} A^{Lse}$		+/+	T/T	C/C	C/C	C/T	G/G	G/G	-/-	A/A	C/C	C/T	T/T
14	Fcat 10462	<i>Leptailurus serval</i>		$A^{Lse} A^{Lse}$			T/T	C/C	C/C	C/T	G/G	G/G	-/-	A/A	C/C	C/T	T/T
15	Fcat 15243	<i>Leptailurus serval</i>		$A^{Lse} A^{Lse}$			T/T	C/C	C/C	C/T	G/G	G/G	-/-	A/A	C/C	C/T	T/T
16	Texas	<i>Leptailurus serval</i>		$A^{Lse} A^{Lse}$		+/+	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
17	Fcat 6817	<i>Felis chaus</i>		$A^{rch} A^{rch}$			C/C	T/T	C/C	C/C	A/A	G/G	-/-	A/A	T/T	C/C	T/T
18	Fcat 6818	<i>Felis chaus</i>		$A^{rch} A^{rch}$			C/C	T/T	C/C	C/C	A/A	G/G	-/-	A/A	T/T	C/C	T/T
Other Pedigree Cats and Domestic Shorthairs																	
19	Fcat 4406	Domestic Shorthair	Tabby	Aa	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
20	Fcat 16833	Domestic Shorthair	Tabby	Aa	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
21	Fcat 15331	Domestic Shorthair	Black solid	aa	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	+/+	A/A	T/T	C/C	T/T
22	A52064	British Shorthair	Tabby	Aa					G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
23	A52401	Siamese	Solid	aa					G/G	C/C	G/G	G/G	+/+	A/A	T/T	C/C	T/T
24	A52444	Australian Mist	Tabby	AA					G/G	C/C	G/G	G/G	-/-	A/A	T/T	C/C	T/T
Bengals - Charcoal																	
25	A65330	Bengal	Blue Rosetted Charcoal	$A^{Pbe} a$					G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
26	G00587	Bengal	Brown Charcoal	$A^{Pbe} a$					G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
27	A65236	Bengal	Brown Charcoal Marbled	$A^{Pbe} a$					G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
28	A65586	Bengal	Brown Charcoal Marbled	$A^{Pbe} a$					G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
29	A65233	Bengal	Brown Charcoal Rosetted	$A^{Pbe} a$					G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
30	A65234	Bengal	Brown Charcoal Rosetted	$A^{Pbe} a$					G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
31	A65366	Bengal	Brown Charcoal Rosetted	$A^{Pbe} a$					G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
32	A65864	Bengal	Brown Charcoal Rosetted	$A^{Pbe} a$					G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T

33	A64108	Bengal	Mink Rosetted Charcoal	A ^{lbe} a				G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T	
34	A63021	Bengal	Silver Charcoal	A ^{lbe} a				G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T	
35	A65863	Bengal	Silver Charcoal Rosetted	A ^{lbe} a				G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T	
36	A65644	Bengal	Silver Rosetted Charcoal	A ^{lbe} a				G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T	
37	CAT 20554	Bengal	Charcoal	A ^{Pbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
38	CAT 21530	Bengal	Brown spotted tabby (charcoal)	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
39	CAT 32049	Bengal	Charcoal Brown spotted tabby	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
40	CAT 32559	Bengal	Brown spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
41	CAT 40090	Bengal	Brown spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
42	CAT 40715	Bengal	Brown spotted tabby (charcoal)	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
43	CAT 41680	Bengal	Silver Spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
44	CAT 42628	Bengal	Charcoal Brown spotted tabby	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
45	CAT 43263	Bengal	Silver charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
46	CAT 44415	Bengal	Seal lynx point charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
47	CAT 44885	Bengal	Silver Spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
48	CAT 47111	Bengal	Brown spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
49	CAT 47147	Bengal	Brown charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
50	CAT 47643	Bengal	Black/silver charcoal marble	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
51	CAT 47730	Bengal	Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
52	CAT 47734	Bengal	Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
53	CAT 48987	Bengal	Seal lynx point charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
54	CAT 48988	Bengal	Brown spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
55	CAT 49056	Bengal	Brown spotted tabby (charcoal)	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
56	CAT 49166	Bengal	Seal Lynx point charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
57	CAT 49515	Bengal	Charcoal silver	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
58	CAT 49628	Bengal	Charcoal silver spotted	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
59	CAT 50152	Bengal	Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
60	CAT 50639	Bengal	Black spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
61	CAT 50920	Bengal	Silver charcoal spotted	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
62	CAT 51702	Bengal	Silver spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
63	Fcat 11790	Bengal	Silver charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
64	Fcat 15654	Bengal	Brown charcoal silver	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
65	Fcat 16099	Bengal	Black silver spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
66	Fcat 16104	Bengal	Black silver spotted charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
67	Fcat 17808	Bengal	Charcoal silver	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
68	Fcat 17809	Bengal	Charcoal snow	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
69	Fcat 17811	Bengal	Very dark Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
70	Fcat 17817	Bengal	Brown charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
71	Fcat 17818	Bengal	Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
72	Fcat 17901	Bengal	Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
73	Fcat 17902	Bengal	Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
74	Fcat 17905	Bengal	Brown charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
75	Fcat 17906	Bengal	Mink Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
76	Fcat 17907	Bengal	Sepia Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
77	TX3	Bengal	Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
78	TX11	Bengal	Charcoal	A ^{lbe} a	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T

79	TX12	Bengal	Charcoal	$A^{l^{be}} a$	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
80	CAT 50679	Bengal	Brown charcoal spotted	$A^{l^{be}} a$	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	+/-	A/A	T/C	C/C	T/T
81	A65584*	Bengal	Light Charcoal	$A^{l^{be}} A^{l^{be}}$					C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
82	CAT 33143*	Bengal	Silver Charcoal	Aa	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
83	CAT 39839*	Bengal	Silver Charcoal	Aa	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
84	CAT 44649*	Bengal	Charcoal Brown spotted	Aa	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
85	CAT 44650*	Bengal	Charcoal Brown spotted	Aa	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
86	Fcat 17812* #	Bengal	Charcoal Silver	$A^{l^{be}} A^{l^{be}}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
87	CAT 49057*	Bengal	Brown spotted tabby charcoal	$A^{l^{de}} A^{l^{de}}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
88	Fcat 16869* #	Bengal	Charcoal	$A^{l^{be}} A$	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	-/-	A/A	T/C	C/C	T/T

Bengals - unknown phenotype

89	A65882	Bengal	unknown	Aa					G/G				+/-		T/T		
90	Fcat 13630	Bengal	unknown	AA	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	-/-	A/A	T/T	C/C	T/T
91	Fcat 16049	Bengal	unknown	AA	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	-/-	A/A	T/T	C/C	T/T
92	CAT26944	Bengal	unknown	AA2		-/-			G/C				-/-		T/T		
93	CAT58292	Bengal	unknown	AA2		-/-	T/T	C/C	G/C	C/C	G/A	G/A	-/-	A/G	T/T	C/C	T/A
94	Fcat 9590	Bengal	unknown	AA	C/C	-/-	T/T	C/C	G/G	C/C	G/G	G/G	-/-	A/A	T/T	C/C	T/T

Bengals - Non-charcoal

95	A65235	Bengal	Silver Rosetted	aA2					G/C	C/C	G/A	G/A	+/-	A/G	T/T	C/C	T/A
96	A65861	Bengal	Silver Rosetted	aA2					G/C	C/C	G/A	G/A	+/-	A/G	T/T	C/C	T/A
97	A65862	Bengal	Silver Rosetted	aA2					G/C	C/C	G/A	G/A	+/-	A/G	T/T	C/C	T/A
98	CAT58200	Bengal	Brown spotted tabby	aA2		-/-	T/T	C/C	G/C	C/C	G/A	G/A	+/-	A/G	T/T	C/C	T/A
99	CAT59813	Bengal	Silver spotted tabby	aA2		-/-	T/T	C/C	G/C	C/C	G/A	G/A	+/-	A/G	T/T	C/C	T/A
100	A65588	Bengal	Black	aa					G/G	C/C	G/G	G/G	+/+	A/A	T/T	C/C	T/T
101	A64110	Bengal	Solid Mink Rosetted	aa					G/G	C/C	G/G	G/G	+/+	A/A	T/T	C/C	T/T
102	A63614	Bengal	Brown	Aa					G/G				+/-	A/A	T/T		
103	A65476	Bengal	Brown	Aa					G/G				+/-	A/A	T/T		
104	A65866	Bengal	Brown Marbled	Aa					G/G				+/-	A/A	T/T		
105	A65867	Bengal	Brown Marbled	Aa					G/G				+/-	A/A	T/T		
106	G00209	Bengal	Brown Marbled Tabby	Aa					G/G				+/-	A/A	T/T		
107	A65859	Bengal	Brown Rosetted	Aa					G/G				+/-	A/A	T/T		
108	A64393	Bengal	Brown Spotted Tabby	Aa					G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
109	G00210	Bengal	Brown Spotted Tabby	Aa					G/G				+/-	A/A	T/T		
110	A62141	Bengal	Silver	Aa					G/G				+/-	A/A	T/T		
111	A65473	Bengal	Silver	Aa					G/G				+/-	A/A	T/T		
112	A65475	Bengal	Silver	Aa					G/G				+/-	A/A	T/T		
113	A52638	Bengal	Snow Marble	Aa					G/G	C/C	G/G	G/G	+/-	A/A	T/T	C/C	T/T
114	A65288	Bengal	Snow Mink	Aa					G/G				+/-	A/A	T/T		
115	A63022	Bengal	Brown Tabby	AA					G/G				-/-	A/A	T/T		
116	A65237	Bengal	Brown Marbled	AA					G/G				-/-	A/A	T/T		
117	A65370	Bengal	Brown Marbled	AA					G/G				-/-	A/A	T/T		
118	A64109	Bengal	Brown Rosetted	AA					G/G	C/C	G/G	G/G	-/-	A/A	T/T	C/C	T/T
119	A65367	Bengal	Brown Rosetted	AA					G/G				-/-	A/A	T/T		
120	A65368	Bengal	Brown Rosetted	AA					G/G				-/-	A/A	T/T		
121	A65369	Bengal	Brown Rosetted	AA					G/G				-/-	A/A	T/T		
122	A65371	Bengal	Brown Rosetted	AA					G/G				-/-	A/A	T/T		

164	CAT59246	Bengal	Brown spotted tabby	AA2				G/C	G/A	G/A	-/-		T/T				
165	A63020	Bengal	Silver tabby	$A^{Pbe} A$				G/C	C/C	G/G	G/G	-/-	A/A	T/C	C/C	T/T	
166	A65474	Bengal	Silver tabby	$A^{Pbe} A$				G/C	C/C	G/G	G/G	-/-	A/A	T/C	C/C	T/T	
167	Fcat 17820	Bengal	Silver tabby	$A^{Pbe} A$	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	-/-	A/A	T/C	C/C	T/T
168	Fcat 17899	Bengal	Non-charcoal tabby	$A^{Pbe} A$	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	-/-	A/A	T/C	C/C	T/T
169	Fcat 17903	Bengal	Non-charcoal tabby	$A^{Pbe} A$	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	-/-	A/A	T/C	C/C	T/T
170	Fcat 17904	Bengal	Non-charcoal tabby	$A^{Lde} A$	C/C	-/-	T/T	C/C	G/C	C/C	G/G	G/G	-/-	A/A	T/C	C/C	T/T
171	Fcat 17821	Bengal	Non-charcoal tabby	$A^{Pbe} A^{Lbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
172	TX10	Bengal	Non-charcoal tabby	$A^{Pbe} A^{Lbe}$	C/C	-/-	T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
Savannahs - Non-charcoal																	
173	A38482	Savannah	Spotted tabby	AA				G/G	C/C	G/G	G/G	-/-	A/A	T/T	C/C	T/T	
174	A62624	Savannah	Spotted tabby	AA				G/G	C/C	G/G	G/G	-/-	A/A	T/T	C/C	T/T	
175	A63613	Savannah	Spotted tabby	AA2				G/C	C/C	G/A	G/A	-/-	A/G	T/T	C/C	T/A	
176	CAT58461	Savannah	Spotted tabby	$A^{Lse} a$			T/T	C/C	G/C	C/T	G/G	G/G	+/-	A/A	T/C	C/T	T/T
177	CAT58452	Savannah	Spotted tabby	$A^{Lse} A^{Lse}$			T/T	C/C	C/C	C/C	G/G	G/G	-/-	A/A	C/C	C/C	T/T
178	CAT58462	Savannah	Spotted tabby	$A^{Lse} a$			T/T	C/C	G/C	C/T	G/G	G/G	+/-	A/A	T/C	C/C	T/T

* non-concordant

picture verified non-charcoal phenotype

‡ deleted sequence: CGCCAGCGGGGAGGGGTAGGGCACCCAGCGGGGAAGGGTAGGG

C/C	A/G	?	A/G	C/C	C/T	+/-	N/A	N/A	N/A	N/A	N/A	A/G		C/T	A/G	A/T	A/G	C/C	A/C	
C/C			A/G	C/T	C/T	+/-	N/A	N/A	N/A	N/A	N/A	N/A								
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	G/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/T	C/C
C/C	A/A	C/T?	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	G/G	C/T	A/A	C/T	C/C	+/+	C/C	T/T	T/T	G/G	+	A/A	G/G	A?	C/C	G/G	A/A	G/G	C/C	A/A
C/C	G/G	C/C	A/A	C/C	C/C	+/+	C/C	T/T	T/T	G/G	+	A/A								
C/C	A/G	T/T	A/G	C/T	C/T	+/-	N/A	N/A	N/A	N/A	N/A	N/A	C/C	A/A	T/T	A/A	T/T	A/A	T/T	C/C
<hr/>																				
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	G/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	T/T	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	?	?	T/T	A/A	T/T	A/A	C/T	C/C
<hr/>																				
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G			T/T	A/A	T/T	A/A	C/C	C/C
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C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/A	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/A	-	G/G			T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/A	-	G/G								
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/A	-	G/G								
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/A	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/A	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/T	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/A	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/T	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/A	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/T	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/T	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	A/G	-	G/G								
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	G/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	T/T	C/C
C/C	A/A	T/T	G/G	C/C	T/T	-/-	T/T	C/C	G/G	G/G	-	G/G	C/C	A/A	T/T	A/A	T/T	A/A	C/C	C/C

C/C	A/G	T/T	A/G	C/T	C/T	+/-	N/A	N/A	N/A	N/A	N/A	N/A	C/G	A/C	C/T	A/G	A/T	A/G	C/T	A/C
C/C	A/G	C/T	A/G	C/C	C/T	+/-	N/A	N/A	N/A	N/A	N/A	N/A	C/G	A/C	C/T	A/G	A/T	A/G	C/T	A/C
C/C	A/G	T/T	A/G	C/T	C/T	+/-	N/A	N/A	N/A	N/A	N/A	N/A	C/G	A/C	C/T	A/G	A/T	A/G	C/T	A/C
C/C	A/G	C/T	A/G	C/C	C/T	+/-	N/A	N/A	N/A	N/A	N/A	N/A	C/G	A/C	C/T	A/G	A/T	A/G	C/C	A/C
C/C	G/G	C/T	A/A	C/T	C/C	+/+	C/C	T/T	T/T	G/G	+	A/A	G/G	?	C/C	G/G	A/A	G/G	C/C	A/A
C/C	G/G	C/T	A/A	C/T	C/C	+/+	C/C	C/C	T/T	G/G	+	A/A	G/G	C/C	C/C	G/G	A/A	G/G	C/C	A/A

Intron 4

c.408+9	c.408+15_408+16	c.408+21	c.408+36	c.408+38	c.408+45	c.408+50	c.408+67	c.408+71	c.408+78+122	c.408+80_4 del	c.408+122	c.408+131	c.408+132	c.408+137
A>G	delA	G>A	G>A	A>C	5 T>G or A	50 G>C	7 G>A	1 G>A	42bp ^s	C>T	C>T	C>T	G>A	G>T

G/G	+/+	A/A	A/A	C/C	A/A	G/G	G/G	A/A	+/+	T/T	C/C	G/G	T/T
G/G	+/+	A/A	A/A	C/C	T/T	G/G	G/G	A/A	+/+	T/T	C/C	G/G	T/T
G/G	+/+	A/A	A/A	C/C	T/T	G/G	G/G	A/A	+/+	T/T	C/C	G/G	T/T
G/G	+/+	A/A	A/A	C/C	T/T	G/G	G/G	A/A	+/+	T/T	C/C	G/G	T/T
G/G	+/+	A/A	A/A	C/C	T/T	G/G	G/G	A/A	+/+	T/T	C/C	G/G	T/T
A/A	-/-	G/G	G/G	C/C	G/G	C/C	G/G	A/A	+/+	T/C	C/C	A/G	G/G
A/A	-/-	G/G	G/G	C/C	G/G	C/C	A/A	A/A	+/+	T/C	C/C	A/G	G/G

A/A	-/-	G/G	G/G	A/A	T/T	G/G	G/G	G/G	-/-	C/C	C/C	G/G	G/G
A/A	-/-	G/G	G/G	A/A	T/T	G/G	G/G	G/G	-/-	C/C	C/C	G/G	G/G
A/A	-/-	G/G	G/G	A/A	T/T	G/G	G/G	G/G	-/-	C/C	C/C	G/G	G/G

A/G	+/-	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A		N/A
A/A	-/-	G/G	G/G	A/A	T/T		G/G	-/-	C/C	C/C		G/G
A/A	-/-	G/G	G/G	A/A	T/T		G/G	-/-	C/T	C/C	A/G	G/G
A/A	-/-	G/G	G/G	A/A	T/T		G/G	-/-	C/T	C/C	A/G	G/G
A/A	-/-	G/G	G/G	A/A	T/T		G/G	-/-	C/T	C/C	A/G	G/G
G/G	+	A/A	A/A	C/C	T/A		A/A	++	C/T	C/T		T/T
A/A	-	G/G	G/G	A/A	T/T		G/G	-/-	C/C	C/C		G/G
<hr/>												
A/A	-/-	G/G	G/G	A/A	T/T		G/G	-/-	C/C	C/C		G/G
A/A	-/-	G/G	G/G	A/A	T/T		G/G	-/-	C/T	C/C	A/G	G/G
A/A	-/-	G/G	G/G	A/A	T/T		G/G	-/-	C/C	C/C		G/G
<hr/>												

A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G

A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	N/A	N/A	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G	
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/T	C/C	A/G	G/G

A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G
A/A	-/-	G/G	G/G	A/A	T/T	G/G	-/-	C/C	C/C	G/G

A/G	+/-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A/G	+/-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A/G	+/-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A/G	+/-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
G/G	+	A/A	A/A	C/C	T/A	A/A	+/+	C/T	C/T	T/T
G/G	+/+	A/A	A/A	C/C	T/A	A/A	+/+	T/T	C/C	T/T

Table S2: Primers for analysis of *ASIP* in hybrid cats and wild felids.

Exon	Exon size (bp)	Product size (bp)	Primer sequence 5'→3'
2	160	462	F: CCAGCCCAAAGAGATACAAGG R: CTGCTTATTAGACTGGTGGTATGC
2	160	237	F ⁴ : GAATATCCTCCGCCTACTCCTG R ⁴ : GGGAGCACGTTTGACATCTT
3	62	464	F: CACACCCTGAGATTTCTGG R: GCAATAACAGAGGTCTAGGAAACA
4	186	495	F ¹ : CCAAGGCTGAGGTGAAGAGG R1 ¹ : AAGCCCCGCCTCCTGAAA R2 ² : GAGAGCCCCACCCTACCC
4	186	280	F ³ : AGAGTTCCCAAGGCTGAGGT R1 ³ : GCCTTGGAGGTGGGTGA R2 ^{2,3} : GGCCTGGAGGCGGGTGA

¹Primers obtained from previously published study (Eizirik *et al.* 2003). ²Primer specific for the Asian leopard cat allele. ³Primers used for sequencing exon 4. ⁴Primers used to amplify exon 2 from European samples with unique allele "A2".

Table S3. Pyrosequencing primers for *ASIP* analysis.

<i>ASIP</i> Variant	Amplicon	
	Size (bp)	Primers
Indel and A127G	105	F: Biotin TGAGGAAAAACCCAGAGATGAC R: GGGGTCAAGCTGGGCTACTTA Seq: ATAGAGACAGAAGRGAGATCCAACAT
T142C	105	F: Biotin TGAGGAAAAACCCAGAGATGAC R: GGGGTCAAGCTGGGCTACTTA Seq: GGGCTACTTACCTACWATAGAGACAGAAG
G41C	62	F: Biotin TGGCCACCCTGCTGGTCT R: TTCCTCAGGTGCCAGGTGAC Seq: GTAGGCAGTGAGGAGGCACAG