

Supplementary material

Appendix 1. Sequences used in this study

	Specimen (Tissue) number	GenBank number			Taxon	Sample locality	Locality	Tissue (this study)	Origin
		ND2	CR	Cyt-b					
1	IOZ, SX106/1909	KT031296	KT031346	/	<i>M. a. leucopsis</i> or <i>alboides</i> *	Huayin, Shaanxi	Huayin	Muscle	Procedure 1
2	IOZ, SX107/1910	KT031297	KT031347	/	<i>M. a. leucopsis</i> or <i>alboides</i> *	Huayin, Shaanxi	Huayin	Muscle	Procedure 1
3	IOZ, SX108/1911	KT031298	KT031348	/	<i>M. a. leucopsis</i> or <i>alboides</i> *	Huayin, Shaanxi	Huayin	Muscle	Procedure 1
4	IOZ, NM09067/11492	KT031299	KT031349	/	<i>M. a. baicalensis</i> *	Eerguna, Nei mongol	Nei mongol	Muscle	Procedure 1
5	IOZ, NM09069/11494	KT031300	KT031350	/	<i>M. a. baicalensis</i> *	Eerguna, Nei mongol	Nei mongol	Muscle	Procedure 1
6	IOZ, NM09204/11629	KT031301	KT031351	/	<i>M. a. baicalensis</i> *	Eerguna, Nei mongol	Nei mongol	Muscle	Procedure 1
7	IOZ, NM09205/11630	KT031302	KT031352	/	<i>M. a. baicalensis</i> *	Eerguna, Nei mongol	Nei mongol	Muscle	Procedure 1
8	IOZ, QY157/11279	KT031303	KT031353	/	<i>M. a. leucopsis</i> *	Qingyang, Gansu	Qingyang	Muscle	Procedure 1
9	IOZ, Fj0513/10503	KT031304	KT031354	/	<i>M. a. leucopsis</i> *	Minhou, Fujian	Minhou	Muscle	Procedure 1
10	KIZ, TZGC040	KT031305	KT031355	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
11	KIZ, TZGC060	KT031306	KT031356	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
12	KIZ, TZGC065	KT031307	KT031357	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1

13	KIZ, TZGC066	KT031308	KT031358	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
14	KIZ, TZGC068	KT031309	KT031359	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
15	KIZ, TZGC069	KT031310	KT031360	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
16	KIZ, TZGC070	KT031311	KT031361	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
17	KIZ, TZGC071	KT031312	KT031362	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
18	KIZ, TZGC072	KT031313	KT031363	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
19	KIZ, TZGC073	KT031314	KT031364	/	<i>M. a. alboides</i>	Zunyi, Guizhou	Zunyi	Muscle	Procedure 1
20	KIZ, XYQS075	KT031315	KT031365	/	<i>M. a. alboides</i>	Xingyi, Guizhou	Xingyi	Muscle	Procedure 1
21	KIZ, XYQS077	KT031316	KT031366	/	<i>M. a. alboides</i>	Xingyi, Guizhou	Xingyi	Muscle	Procedure 1
22	KIZ, XYQS078	KT031317	KT031367	/	<i>M. a. alboides</i>	Xingyi, Guizhou	Xingyi	Muscle	Procedure 1
23	KIZ, XYQS079	KT031318	KT031368	/	<i>M. a. alboides</i>	Xingyi, Guizhou	Xingyi	Muscle	Procedure 1
24	KIZ, XYQS080	KT031319	KT031369	/	<i>M. a. alboides</i>	Xingyi, Guizhou	Xingyi	Muscle	Procedure 1
25	KIZ, XYQS082	KT031320	KT031370	/	<i>M. a. alboides</i>	Xingyi, Guizhou	Xingyi	Muscle	Procedure 1
26	KIZ, XYQS083	KT031321	KT031371	/	<i>M. a. alboides</i>	Xingyi, Guizhou	Xingyi	Muscle	Procedure 1
27	S04486	KT031322	KT031372	/	<i>M. a. leucopsis</i> *	Guangdong	Guangdong	Muscle	Procedure 1

28	IOZ, LJ12012	KT031323	KT031373	/	<i>M. a. alboides</i> *	Lijiang, Yunnan	Lijiang	Muscle	Procedure 1
29	IOZ, LJ12017	KT031324	KT031374	/	<i>M. a. alboides</i> *	Lijiang, Yunnan	Lijiang	Muscle	Procedure 1
30	IOZ, LJ12025	KT031325	KT031375	/	<i>M. a. alboides</i> *	Lijiang, Yunnan	Lijiang	Muscle	Procedure 1
31	IOZ, LJ12026	KT031326	KT031376	/	<i>M. a. alboides</i> *	Lijiang, Yunnan	Lijiang	Muscle	Procedure 1
32	ZMUC, 134107	KT031328	KT031378	/	<i>M. a. alba</i>	Jutland, Denmark	Denmark	Muscle	Procedure 1
33	NRM, 571392	KT031295	KT031345	/	<i>M. a. alba</i>	Bodensee, Germany	Bodensee	Study skin	Procedure 2
34	NRM, 571393	KT031289	KT031339	/	<i>M. a. alba</i>	Bodensee, Germany	Bodensee	Study skin	Procedure 2
35	NRM, 571395	KT031290	KT031340	/	<i>M. a. lugens</i>	Kuriles	Kuriles	Study skin	Procedure 2
36	NRM, 571394	KT031327	KT031377	/	<i>M. a. lugens</i>	Kuriles	Kuriles	Study skin	Procedure 2
37	NRM, 571397	KT031330	KT031380	/	<i>M. a. alba or personata</i> (previously <i>persica</i>)	Iran	Iran	Study skin	Procedure 2
38	NRM, 571398	KT031291	KT031341	/	<i>M. a. yarrellii</i>	Scotland, UK	British Isles	Study skin	Procedure 2
39	NRM, 571396	KT031329	KT031379	/	<i>M. a. yarrellii</i>	Scotland, UK	British Isles	Study skin	Procedure 2
40	ZMUC, 93.419	KT031286	KT031336	/	<i>M. a. alboides</i>	Nepal, Patan	Nepal	Study skin	Procedure 2
41	ZMUC, 93.420	KT031331	KT031381	/	<i>M. a. alboides</i>	Nepal, Manora River	Nepal	Study skin	Procedure 2

42	ZMUC, 93.421	KT031292	KT031342	/	<i>M. a. alboides</i>	Nepal, Dingla	Nepal	Study skin	Procedure 2
43	ZMUC, 25.793	KT031287	KT031337	/	<i>M. a. personata</i>	Afghanistan, Nuristan	Afghanistan	Study skin	Procedure 2
44	ZMUC, 25.792	KT031293	KT031343	/	<i>M. a. personata</i>	Afghanistan, Nuristan	Afghanistan	Study skin	Procedure 2
45	ZMUC, 21.429	KT031294	KT031344	/	<i>M. a. yarrellii</i>	England, UK	British Isles	Study skin	Procedure 2
46	ZMUC, 21.432	KT031288	KT031338	/	<i>M. a. yarrellii</i>	England, UK	British Isles	Study skin	Procedure 2
47	UU Masub Ma06	KT031332	KT031382	/	<i>M. a. subpersonata</i>	Ouerzazate	Morocco	Blood and Feather	Procedure 3
48	UU Masub Ma07	KT031333	KT031383	/	<i>M. a. subpersonata</i>	Ouerzazate	Morocco	Blood and Feather	Procedure 3
49	UU Masub PAC1	KT031334	KT031384	/	<i>M. a. subpersonata</i>	/	Morocco	Blood and Feather	Procedure 3
50	KU ATP 99-225	KT031335	KT031385	/	<i>M. a. yarrellii</i>	/	British Isles	Muscle	Procedure 3
51	UWBM, 58385	AY681496	AY681730	/	<i>M. a. alba</i>	Norway	Norway	/	Pavlova et al. 2005
52	UWBM, 49417	AY681497	AY681731	/	<i>M. a. alba</i>	Kurskaya	Kursk	/	Pavlova et al. 2005
53	UWBM, 61124	AY681498	AY681732	/	<i>M. a. alba</i>	Smolenskaya	Smolensk	/	Pavlova et al. 2005
54*	UWBM, 49718	AY681499	AY681733	/	<i>M. a. alba</i>	Murmanskaya	Murmansk	/	Pavlova et al. 2005
55	UWBM, 49726	AY681500	AY681734	/	<i>M. a. alba</i>	Murmanskaya	Murmansk	/	Pavlova et al. 2005
56	UWBM, 49736	AY681501	AY681735	/	<i>M. a. alba</i>	Murmanskaya	Murmansk	/	Pavlova et al. 2005

57	UWBM, 49745	AY681502	AY681736	/	<i>M. a. alba</i>	Murmanskaya	Murmansk	/	Pavlova et al. 2005
58	UWBM, 49242	AY681503	AY681737	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
59	UWBM, 49196	AY681504	AY681738	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
60	UWBM, 60954	AY681505	AY681739	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
61	UWBM, 61317	AY681506	AY681740	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
62	UWBM, 61321	AY681507	AY681741	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
63	UWBM, 49586	AY681508	AY681742	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
64	UWBM, 49607	AY681510	AY681744	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
65	UWBM, 61287	AY681511	AY681745	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
66	UWBM, 59518	AY681512	AY681746	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
67	UWBM, 61557	AY681513	AY681747	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
68	UWBM, 61602	AY681514	AY681748	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
69	UWBM, 61613	AY681515	AY681749	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
70	UWBM, 61642	AY681517	AY681751	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
71	UWBM, 61645	AY681518	AY681752	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005

72	UWBM, 61657	AY681519	AY681753	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
73	UWBM, IUK138	AY681520	AY681754	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
74	UWBM, 57388	AY681521	AY681755	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
75	UWBM, IUK135	AY681522	AY681756	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
76	UWBM, 73801	AY681523	AY681757	/	<i>M. a. alba</i>	Buryatiya	Buryatia	/	Pavlova et al. 2005
77	UWBM, 73780	AY681524	AY681758	/	<i>M. a. alba</i>	Buryatiya	Buryatia	/	Pavlova et al. 2005
78	UWBM, 47246	AY681525	AY681759	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
79	UWBM, 46962	AY681526	AY681760	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
80	UWBM, 47243	AY681527	AY681761	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
81	UWBM, 47247	AY681528	AY681762	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
82	UWBM, 47248	AY681529	AY681763	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
83	UWBM, 47265	AY681530	AY681764	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
84	UWBM, 47266	AY681531	AY681765	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
85	UWBM, 47267	AY681532	AY681766	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
86	BMNH, 44265	AY681533	AY681767	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005

87	BMNH, 44311	AY681534	AY681768	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
88	BMNH, 44271	AY681535	AY681769	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
89	BMNH, 44296	AY681536	AY681770	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
90	BMNH, 44608	AY681537	AY681771	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
91	BMNH, 44206	AY681538	AY681772	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
92	BMNH, 44234	AY681539	AY681773	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
93	BMNH, EVN325	AY681540	AY681774	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
94	BMNH, EVN338	AY681541	AY681775	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
95	BMNH, EVN358	AY681542	AY681776	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
96	BMNH, EVN361	AY681543	AY681777	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
97	BMNH, 44336	AY681544	AY681778	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
98	BMNH, 44382	AY681545	AY681779	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
99	BMNH, 44401	AY681546	AY681780	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
100	BMNH, 44403	AY681547	AY681781	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005
101	BMNH, 44239	AY681548	AY681782	/	<i>M. a. alba</i>	Medvedevo	Medvedevo	/	Pavlova et al. 2005

102	BMNH, 44536	AY681549	AY681783	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
103	BMNH, 44563	AY681550	AY681784	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
104	BMNH, 44691	AY681551	AY681785	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
105	BMNH, 44692	AY681552	AY681786	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
106	BMNH, 44697	AY681553	AY681787	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
107	BMNH, 44700	AY681554	AY681788	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
108	BMNH, 44576	AY681555	AY681789	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
109	BMNH, 44579	AY681556	AY681790	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
110	BMNH, 44584	AY681557	AY681791	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
111	BMNH, 44585	AY681558	AY681792	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
112	BMNH, 44469	AY681559	AY681793	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
113	BMNH, 44472	AY681560	AY681794	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
114	BMNH, 44473	AY681561	AY681795	/	<i>M. a. alba</i>	Mezen	Mezen	/	Pavlova et al. 2005
115	UWBM, 51070	AY681562	AY681796	/	<i>M. a. leucopsis</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005
116	UWBM, 74897	AY681563	AY681797	/	<i>M. a. leucopsis</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005

117	UWBM, 75978	AY681564	AY681798	/	<i>M. a. leucopsis</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005
118	UWBM, 75979	AY681565	AY681799	/	<i>M. a. leucopsis</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005
119	UWBM, 76010	AY681566	AY681800	/	<i>M. a. leucopsis</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005
120	UWBM, 74954	AY681567	AY681801	/	<i>M. a. leucopsis</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005
121	UWBM, 51087	AY681568	AY681802	/	<i>M. a. leucopsis</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005
122	UWBM, 76005	AY681569	AY681803	/	<i>M. a. lugens</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005
123	UWBM, 76006	AY681570	AY681804	/	<i>M. a. lugens</i>	Primorskiy Kray	Primor'e	/	Pavlova et al. 2005
124	UWBM, 73435	AY681571	AY681805	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005
125	UWBM, 73438	AY681572	AY681806	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005
126	UWBM, 73462	AY681573	AY681807	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005
127	UWBM, 73533	AY681574	AY681808	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005
128	UWBM, 73532	AY681575	AY681809	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005
129	UWBM, 73709	AY681576	AY681810	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005
130	UWBM, 73658	AY681577	AY681811	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005
131	UWBM, 73735	AY681578	AY681812	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005

132	UWBM, 73748	AY681579	AY681813	/	<i>M. a. baicalensis</i>	Irkutskaya	Irkutsk	/	Pavlova et al. 2005
133	UWBM, 66313	AY681580	AY681814	/	<i>M. a. personata</i>	Tuva	Tuva	/	Pavlova et al. 2005
134	UWBM, 66331	AY681581	AY681815	/	<i>M. a. personata</i>	Tuva	Tuva	/	Pavlova et al. 2005
135	UWBM, 66453	AY681582	AY681816	/	<i>M. a. personata</i>	Tuva	Tuva	/	Pavlova et al. 2005
136	UWBM, 66468	AY681583	AY681817	/	<i>M. a. personata</i>	Tuva	Tuva	/	Pavlova et al. 2005
137	UWBM, 66497	AY681584	AY681818	/	<i>M. a. personata</i> × <i>baicalensis</i>	Tuva	Tuva	/	Pavlova et al. 2005
138	UWBM, 66653	AY681585	AY681819	/	<i>M. a. personata</i>	Tuva	Tuva	/	Pavlova et al. 2005
139	UWBM, 66712	AY681587	AY681821	/	<i>M. a. personata</i>	Tuva	Tuva	/	Pavlova et al. 2005
140	UWBM, 66728	AY681588	AY681822	/	<i>M. a. personata</i>	Tuva	Tuva	/	Pavlova et al. 2005
141	UWBM, 66727	AY681589	AY681823	/	<i>M. a. personata</i>	Tuva	Tuva	/	Pavlova et al. 2005
142	UWBM, 67630	AY681590	AY681824	/	<i>M. a. personata</i> or <i>baicalensis</i>	Tuva	Tuva	/	Pavlova et al. 2005
143	UWBM, 67631	AY681591	AY681825	/	<i>M. a. personata</i> or <i>baicalensis</i>	Tuva	Tuva	/	Pavlova et al. 2005
144	UWBM, 71061	AY681592	AY681826	/	<i>M. a. baicalensis</i>	Tuva	Tuva	/	Pavlova et al. 2005
145	UWBM, 71062	AY681593	AY681827	/	<i>M. a. baicalensis</i>	Tuva	Tuva	/	Pavlova et al. 2005
146	UWBM, 71115	AY681594	AY681828	/	<i>M. a. baicalensis</i>	Tuva	Tuva	/	Pavlova et al. 2005

147	UWBM, 67638	AY681595	AY681829	/	<i>M. a. personata</i> or <i>baicalensis</i>	Tuva	Tuva	/	Pavlova et al. 2005
148	UWBM, 66420	AY681596	AY681830	/	<i>M. a. alba</i>	Kostroma	Kostroma	/	Pavlova et al. 2005
149	UWBM, 66752	AY681597	AY681831	/	<i>M. a. alba</i>	Kostroma	Kostroma	/	Pavlova et al. 2005
150	UWBM, 61443	AY681598	AY681832	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
151	UWBM, 61423	AY681599	AY681833	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
152	UWBM, 61449	AY681600	AY681834	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
153	UWBM, 61488	AY681602	AY681836	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
154	UWBM, 64606	AY681603	AY681837	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
155	UWBM, 64607	AY681604	AY681838	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
156	UWBM, 64608	AY681605	AY681839	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
157	UWBM, 71214	AY681606	AY681840	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
158	UWBM, 71216	AY681607	AY681841	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
159	UWBM, 64630	AY681608	AY681842	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
160	UWBM, 64613	AY681609	AY681843	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
161	UWBM, 64632	AY681610	AY681844	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005

162	UWBM, 64639	AY681611	AY681845	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
163	UWBM, 71223	AY681612	AY681846	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
164	UWBM, 64724	AY681613	AY681847	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
165	UWBM, 64725	AY681614	AY681848	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
166	UWBM, 64850	AY681615	AY681849	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
167	UWBM, 64852	AY681616	AY681850	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
168	UWBM, 61489	AY681617	AY681851	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
169	UWBM, 44439	AY681618	AY681852	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
170	UWBM, 44440	AY681619	AY681853	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
171	UWBM, 44631	AY681620	AY681854	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
172	UWBM, 44633	AY681621	AY681855	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
173	UWBM, 44640	AY681622	AY681856	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
174	UWBM, 44647	AY681623	AY681857	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
175	UWBM, 51666	AY681624	AY681858	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
176	UWBM, 56834	AY681625	AY681859	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005

177	UWBM, 56835	AY681626	AY681860	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
178	UWBM, 56864	AY681627	AY681861	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
179	UWBM, 56865	AY681628	AY681862	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
180	UWBM, 56866	AY681629	AY681863	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
181	UWBM, 59558	AY681630	AY681864	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
182	UWBM, 59618	AY681631	AY681865	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
183	UWBM, 59619	AY681632	AY681866	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
184	UWBM, 59637	AY681633	AY681867	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
185	UWBM, 59649	AY681634	AY681868	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
186	UWBM, 59796	AY681635	AY681869	/	<i>M. a. baicalensis</i>	Mongolia	Mongolia	/	Pavlova et al. 2005
187	UWBM, 56933	AY681636	AY681870	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
188	UWBM, 46420	AY681637	AY681871	/	<i>M. a. personata</i>	Almaty	Almaty	/	Pavlova et al. 2005
189	UWBM, 61007	AY681639	AY681873	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
190	UWBM, 61009	AY681641	AY681875	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
191	UWBM, 61014	AY681642	AY681876	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005

192	UWBM, 61016	AY681643	AY681877	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
193	UWBM, 61017	AY681644	AY681878	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
194	UWBM, 61224	AY681646	AY681880	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
195	UWBM, 61245	AY681647	AY681881	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
196	UWBM, 61246	AY681648	AY681882	/	<i>M. a. alba</i>	Krasnodarskiy Kray	Krasnodar	/	Pavlova et al. 2005
197	UWBM, 61258	AY681649	AY681883	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
198	UWBM, 61286	AY681650	AY681884	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
199	UWBM, 59407	AY681651	AY681885	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
200	UWBM, 59408	AY681652	AY681886	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
201	UWBM, 59409	AY681653	AY681887	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
202	UWBM, 59429	AY681654	AY681888	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
203	UWBM, 59495	AY681655	AY681889	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
204	UWBM, 59500	AY681656	AY681890	/	<i>M. a. alba</i>	Yamal Labytnangi	Yamal	/	Pavlova et al. 2005
205	UWBM, 46564	AY681657	AY681891	/	<i>M. a. personata</i>	Gorno-Altay	Gorno-Altay	/	Pavlova et al. 2005
206	UWBM, 59545	AY681658	AY681892	/	<i>M. a. alba</i>	Sverdlovsk	Sverdlovsk	/	Pavlova et al. 2005

207	UWBM, 46410	AY681659	AY681893	/	<i>M. a. personata</i>	Almaty	Almaty	/	Pavlova et al. 2005
208	UWBM, 46411	AY681660	AY681894	/	<i>M. a. personata</i>	Almaty	Almaty	/	Pavlova et al. 2005
209*	UWBM, 46304	AY681661	AY681895	/	<i>M. a. personata</i>	Gorno-Altay	Gorno-Altay	/	Pavlova et al. 2005
210	UWBM, 49543	AY681662	AY681896	/	<i>M. a. alba</i>	Sverdlovsk	Sverdlovsk	/	Pavlova et al. 2005
211	UWBM, 51794	AY681663	AY681897	/	<i>M. a. personata</i>	Krasnoyarskiy Kray	Krasnoyar	/	Pavlova et al. 2005
212	UWBM, 51793	AY681664	AY681898	/	<i>M. a. alba</i> or <i>baicalensis</i>	Krasnoyarskiy Kray	Krasnoyar	/	Pavlova et al. 2005
213	UWBM, 46419	AY681665	AY681899	/	<i>M. a. personata</i>	Almaty	Almaty	/	Pavlova et al. 2005
214	UWBM, 59795	AY681666	AY681900	/	<i>M. a. baicalensis</i>	Mongolia	Mongolia	/	Pavlova et al. 2005
215	UWBM, 59983	AY681667	AY681901	/	<i>M. a. baicalensis</i>	Mongolia	Mongolia	/	Pavlova et al. 2005
216	UWBM, 59785	AY681668	AY681902	/	<i>M. a. baicalensis</i>	Mongolia	Mongolia	/	Pavlova et al. 2005
217	UWBM, 49536	AY681669	AY681903	/	<i>M. a. alba</i>	Sverdlovsk	Sverdlovsk	/	Pavlova et al. 2005
218	UWBM, 59554	AY681670	AY681904	/	<i>M. a. alba</i>	Sverdlovsk	Sverdlovsk	/	Pavlova et al. 2005
219	UWBM, 49555	AY681671	AY681905	/	<i>M. a. alba</i>	Sverdlovsk	Sverdlovsk	/	Pavlova et al. 2005
220	UWBM, 56966	AY681672	AY681906	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
221	UWBM, 56975	AY681673	AY681907	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005

222	UWBM, 56523	AY681674	AY681908	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
223	UWBM, 56778	AY681675	AY681909	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
224	UWBM, 56536	AY681676	AY681910	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
225	UWBM, 56551	AY681677	AY681911	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
226	UWBM, 56567	AY681678	AY681912	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
227	UWBM, 56828	AY681679	AY681913	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
228	UWBM, 56824	AY681680	AY681914	/	<i>M. a. alba</i>	Noyabr'sk	Noyabr'sk	/	Pavlova et al. 2005
229	UWBM, 56447	AY681681	AY681915	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
230	UWBM, 56633	AY681682	AY681916	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
231	UWBM, 56667	AY681683	AY681917	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
232	UWBM, 56668	AY681684	AY681918	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
233	UWBM, 56669	AY681685	AY681919	/	<i>M. a. alba</i>	Astrakhanskaya	Astrakhan	/	Pavlova et al. 2005
234	UWBM, 47169	AY681686	AY681920	/	<i>M. a. ocularis</i>	Khabarovsk	Khabarovsk	/	Pavlova et al. 2005
235	UWBM, 47161	AY681687	AY681921	/	<i>M. a. leucopsis</i>	Khabarovsk	Khabarovsk	/	Pavlova et al. 2005
236	UWBM, 47170	AY681688	AY681922	/	<i>M. a. leucopsis</i>	Khabarovsk	Khabarovsk	/	Pavlova et al. 2005

237	UWBM, 47189	AY681689	AY681923	/	<i>M. a. leucopsis</i>	Khabarovsk	Khabarovsk	/	Pavlova et al. 2005
238	UWBM, 47244	AY681690	AY681924	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
239	UWBM, 47245	AY681691	AY681925	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
240	UWBM, 46991	AY681692	AY681926	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
241	UWBM, 43820	AY681693	AY681927	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
242	UWBM, 43837	AY681695	AY681929	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
243	UWBM, 44099	AY681697	AY681931	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
244	UWBM, 44106	AY681698	AY681932	/	<i>M. a. ocularis</i>	Magadanskaya	Magadan	/	Pavlova et al. 2005
245*	UWBM, 44591	AY681699	AY681933	/	<i>M. a. ocularis</i> or <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
246	UWBM, 44605	AY681700	AY681934	/	<i>M. a. lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
247	UWBM, 44592	AY681701	AY681935	/	<i>M. a. lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
248*	UWBM, 44255	AY681702	AY681936	/	<i>M. a. ocularis</i>	Yakutiya Cherskiy	Cherskiy	/	Pavlova et al. 2005
249	UWBM, 44582	AY681703	AY681937	/	<i>M. a. ocularis</i> × <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
250	UWBM, 44588	AY681704	AY681938	/	<i>M. a. ocularis</i> × <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
251	UWBM, 44587	AY681705	AY681939	/	<i>M. a. ocularis</i> × <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005

252	UWBM, 44606	AY681706	AY681940	/	<i>M. a. ocularis</i> × <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
253	UWBM, 44590	AY681707	AY681941	/	<i>M. a. ocularis</i> × <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
254	UWBM, 44320	AY681708	AY681942	/	<i>M. a. ocularis</i> × <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
255	UWBM, 44586	AY681709	AY681943	/	<i>M. a. ocularis</i> × <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
256	UWBM, 44589	AY681710	AY681944	/	<i>M. a. ocularis</i> × <i>lugens</i>	Kamchatka	Kamchatka	/	Pavlova et al. 2005
257	UWBM, 49570	AY681711	AY681945	/	<i>M. a. alba</i>	Moscovskaya	Moscow	/	Pavlova et al. 2005
258	UWBM, 47264	AY681712	AY681946	/	<i>M. a. lugens</i>	Sakhalinskaya	Sakhalin	/	Pavlova et al. 2005
259	BMNH, 44766	AY681713	AY681947	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
260	BMNH, IVF402	AY681714	AY681948	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
261	BMNH, 44963	AY681715	AY681949	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
262	BMNH, 44962	AY681716	AY681950	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
263	BMNH, EVN473	AY681717	AY681951	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
264	BMNH, 44783	AY681718	AY681952	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
265	BMNH, 44904	AY681719	AY681953	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
266	BMNH, EVN464	AY681720	AY681954	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005

267	BMNH, IVF408	AY681721	AY681955	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
268	BMNH, IVF414	AY681722	AY681956	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
269	BMNH, 44903	AY681723	AY681957	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
270	BMNH, EVN515	AY681724	AY681958	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
271	BMNH, 44823	AY681725	AY681959	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
272	BMNH, IVF400	AY681726	AY681960	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
273	BMNH, IVF377	AY681727	AY681961	/	<i>M. a. ocularis</i>	Anadyr	Anadyr'	/	Pavlova et al. 2005
274*	AMNH, 2322	AF526470	/	AF526435	<i>M. maderaspetensis</i>	/	/	/	Voelker 2002
275*	UWBM, 53198	AF526501	/	AF526466	<i>M. aguimp</i>	/	/	/	Voelker 2002
276*	MBM, 5840	AF526484	/	AF526449	<i>M. aguimp</i>	/	/	/	Voelker 2002
277*	UWBM, 46556	AF526471	/	AF526436	<i>M. cinerea</i>	/	/	/	Voelker 2002
278*	UWBM, 44455	AF526495	/	AF526460	<i>M. cinerea</i>	/	/	/	Voelker 2002
279*	UWBM, 49351	AF526475	/	AF526440	<i>M. citreola</i>	/	/	/	Voelker 2002
280*	UWBM, 46336	AF526477	/	AF526442	<i>M. citreola</i>	/	/	/	Voelker 2002
281*	UWBM, 46360	AF526479	/	AF526444	<i>M. flava</i>	/	/	/	Voelker 2002

282*	UWBM, 46381	AF526480	/	AF526445	<i>M. flava</i>	/	/	/	Voelker 2002
283*	UWBM, 49434	AF526487	/	AF526452	<i>M. flava</i>	/	/	/	Voelker 2002
284*	UWBM, 51665	AF526488	/	AF526453	<i>M. flava</i>	/	/	/	Voelker 2002
285*	UWBM, 44273	AF526489	/	AF526454	<i>M. flava</i>	/	/	/	Voelker 2002
286*	UWBM, 46234	AF526490	/	AF526455	<i>M. flava</i>	/	/	/	Voelker 2002
287*	UWBM, 43953	AF526491	/	AF526456	<i>M. flava</i>	/	/	/	Voelker 2002
288*	UWBM, 47176	AF526492	/	AF526457	<i>M. flava</i>	/	/	/	Voelker 2002
289*	UWBM, 47505	AF526493	/	AF526458	<i>M. flava</i>	/	/	/	Voelker 2002
290*	UWBM, 56836	AF526494	/	AF526459	<i>M. flava</i>	/	/	/	Voelker 2002
291*	UWBM, 47504	AF526503	/	AF526468	<i>M. flava</i>	/	/	/	Voelker 2002
292*	UWBM, 52913	AF526500	/	AF526465	<i>M. clara</i>	/	/	/	Voelker 2002
293*	UWBM, 53178	AF526502	/	AF526467	<i>M. clara</i>	/	/	/	Voelker 2002
294*	FMNH, 355292	AF526504	/	AF526469	<i>M. clara</i>	/	/	/	Voelker 2002
295*	UWBM, 53145	AF526474	/	AF526439	<i>M. capensis</i>	/	/	/	Voelker 2002
296*	MBM, 5842	AF526483	/	AF526448	<i>M. capensis</i>	/	/	/	Voelker 2002

297*	FMNH, 352834	AF526473	/	AF526438	<i>M. flaviventris</i>	/	/	/	Voelker 2002
298*	FMNH, 352832	AF526481	/	AF526446	<i>M. flaviventris</i>	/	/	/	Voelker 2002

The sequences with an asterisk after their index numbers were used in the molecular clock calibration.

The samples with an asterisk after their scientific names were identified to subspecies by sample localities.

AMNH, American Museum of Natural History, New York, USA; BMNH, Bell Museum of Natural History, University of Minnesota, Minneapolis, USA; FMNH, Field Museum of Natural History, Chicago, USA; IOZ, Institute of Zoology, Chinese Academy of Sciences, Beijing, China; KIZ, Kunming Institute of Zoology, Chinese Academy of Sciences, Kunming, China; KUMNH, University of Kansas Biodiversity Institute, Lawrence, Kansas, USA; MBM, Marjorie Barrick Museum, University of Nevada Las Vegas, Las Vegas, USA; NRM, Swedish Museum of Natural History, Stockholm, Sweden; South China Institute of Endangered Animals (only S04486), GuangDong, China; UU, Uppsala University, Uppsala, Sweden; UWBM, Burke Museum of Natural History and Culture, University of Washington, Seattle, USA; ZMUC, Zoological Museum, University of Copenhagen, Copenhagen, Denmark. (The museum names are in alphabetical order)

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Appendix 2. Primers used in PCR and sequencing

Marker	Primer	Sequence	References
ND2	L5219	CCCATACCCCGAAAATGATG	Sorenson et al. 1999
ND2	H5850	ATTAGGGCGTATAGGTAGAAGTT	Dong et al. 2010
ND2	L5809	CCATTTCCCACCTAGGCTGAAT	Cicero and Johnson 2001, modified
ND2	H6312	CTTATTTGGCTTTGAAGGCC	Cicero and Johnson 2001, modified
ND2	MAI_ND2_F1	GCCGGCCTGGAAATTAACAC	This Study
ND2	MAI_ND2_R1	GTCCTAGTTTTATTGCGATAGCTG	This Study
ND2	MAI_ND2_F2	CCACCCAACATCCTGCCTAA	This Study
ND2	MAI_ND2_R2N	CCTAAGGCAGTTGAAAGGATG	This Study
ND2	MAI_ND2_F3	CGCTAAACCCACATTAAC	This Study
ND2	MAI_ND2_R3	TAGATAGTTTTAGGACTTTCATTGAG	This Study
ND2	MAI_ND2_F4	CTATATGCACTAATAACTACAACGTAT	This Study
ND2	MAI_ND2_R4	GTAGGGAGAGGAGTGAGATGA	This Study

ND2	MAI_ND2_F5	ACTAACCAAACAAGACATGGCC	This Study
ND2	MAI_ND2_R5	TAGCGAGAATTATGGGGGAGG	This Study
ND2	L5215	TATCGGGCCCATACCCCGAAAAT	Hackett 1996
ND2	H6313	CTCTTATTTAAGGCTTTGAAGGC	Johnson and Sorenson 1998
ND2	H5776	TGGGARATGGAGGARAAGGC	Klicka et al. 2000
ND2	L5758M	GGATGAATRGGMCTYAAAYCARAC	Ödeen and Björklund 2003
ND2	H5950	AGYATTGCGTTTAGTGMKGG	Ödeen and Björklund 2003
CR	LCR4	CTCACGAGAACCGAGCTACT	Tarr 1995
CR	LCON2	CTTCCTCTTGACATGTCCAT	Zink and Blackwell 1998
CR	MAI_CR_F1	GGAATGTCCCTGTACACCT	This Study
CR	MAI_CR_R1	AAAACACGCGTAAAATGGGCT	This Study
CR	MAI_CR_F2	ATTTTATCGTTTTCTAGGGACTTT	This Study
CR	MAI_CR_R2	TGTGATTGTTTTAAGGTCATGATG	This Study
CR	MAI_CR_F3	ATTTTCTAATATAACAAACCAACAATT	This Study
CR	FCRI5'	TCAGGGTATGTATAATATGC	Boag in Baker and Marshall 1997

CR	F389	TATGTCCGGCAACCATTACACTAT	Baker and Marshall 1997
CR	L16150	TTCCTCACCAACTCCCAAAGC	Saetre et al. 2001
CR	F304	CTTGACACTGATGCACTTTG	Baker and Marshall 1997
CR	H1343	CACTGGGATGCGGATACTTGCATG	Berg et al. 1995
CR	APC1	CGAAATCACCCATACGTTGA	Ödeen and Björklund 2003
CR	L16576	ACGAAAGAAACCCCTAAACTCAC	Ödeen and Björklund 2003
CR	L16749	CGAGAYCTACGGCCTGAAAA	Ödeen and Björklund 2003
CR	MCRI2	GAAGCGCGATCAATAGATAACC	Ödeen and Björklund 2003

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Appendix 3. Mismatch distribution and Neutral tests of clade SE

Locality	N	SSD	Fu's F_s	Tajima's D
Q&H	4	–	-0.2877	-0.7545
Zunyi	10	0.1121*	-0.7116	-1.1803
Xingyi	7	0.0407	0.7516	0.5177
Lijiang	4	–	-1.2368	0.9562
Almaty	4	–	0.82472	-0.8241

* $p < 0.05$; Q&H: combined Qingyang and Huayin to increase statistical significance.

Zunyi	#Diff	Observed	Model Freq.
	0	5	3.2

1	0	8.5
2	17	11.2
3	14	9.9
4	0	6.5
5	0	3.4
6	0	1.5
7	7	0.6
8	2	0.2
9	0	0.1

Xingyi	#Diff	Observed	Model Freq.
	0	3	0.3
	1	0	1.4
	2	2	2.9

3	6	4
4	6	4.1
5	4	3.4
6	0	2.3
