

S1 Appendix. Origin of the sequences used in this study (taxon names follow the classification of the IUCN, 2020)

Evolutionary history of Carnivora (Mammalia, Laurasiatheria) inferred from mitochondrial genomes

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Clade	Family	Subfamily	Genus	Species	subspecies	Voucher	DNA sequencing	Accession number	Number of genomes
OUTGROUP	Tapiridae		<i>Tapirus</i>	<i>terrestris</i>		T358 = # 4020 Zoo de La Palmyre	Sanger (overlapping PCRs)	MW257204	1
OUTGROUP	Manidae		<i>Phataginus</i>	<i>tricuspis</i>				NC 026780	1
Feliformia	Felidae	Felinae	<i>Acinonyx</i>	<i>jubatus</i>				NC 005212	3
Caniformia	Ursidae	Ailuropodinae	<i>Ailuropoda</i>	<i>melanoleuca</i>				NC 009492	5
Caniformia	Ailuridae		<i>Ailurus</i>	<i>fulgens</i>				NC 011124	1
Caniformia	Ailuridae		<i>Ailurus</i>	<i>fulgens</i>	<i>styani</i>			NC 009691	1
Caniformia	Mustelidae	Lutrinae	<i>Aonyx</i>	<i>cinerea</i>				NC 035814	2
Feliformia	Viverridae	Paradoxurinae	<i>Arctictis</i>	<i>binturong</i>		T605 = MNHN TC28; NMS RL78/97	Sanger (overlapping PCRs)	MW257218	2
Caniformia	Otariidae		<i>Arctocephalus</i>	<i>australis</i>				MG023139	1
Caniformia	Otariidae		<i>Arctocephalus</i>	<i>forsteri</i>				KT693377	17
Caniformia	Otariidae		<i>Arctocephalus</i>	<i>forsteri</i>				NC 004023	28
Caniformia	Otariidae		<i>Arctocephalus</i>	<i>gazella</i>				BK10918	1
Caniformia	Otariidae		<i>Arctocephalus</i>	<i>pusillus</i>				NC 008417	1
Caniformia	Otariidae		<i>Arctocephalus</i>	<i>townsendi</i>				NC 008420	1
Caniformia	Ursidae	Tremarctinae	<i>Arctodus</i>	<i>simus</i>				NC 011116	1
Caniformia	Mustelidae	Melinae	<i>Arctonyx</i>	<i>collaris</i>				NC 020645	1
Caniformia	Ursidae	Tremarctinae	<i>Arctotherium</i>	sp.				NC 030174	1
Feliformia	Herpestidae	Herpestinae	<i>Atilax</i>	<i>paludinosus</i>		T606 = MNHN TC59	Sanger (overlapping PCRs)	MW257238	1
Caniformia	Procyonidae		<i>Bassaricyon</i>	<i>neblina</i>				SRX1097850*	1
Caniformia	Procyonidae		<i>Bassariscus</i>	<i>sumichrasti</i>				SRX1099089*	1
Feliformia	Herpestidae	Herpestinae	<i>Bdeogale</i>	<i>nigripes</i>		GLC15, Gabon	Sanger (overlapping PCRs)	MW257221	1
Caniformia	Otariidae		<i>Callorhinus</i>	<i>ursinus</i>				NC 008415	1
Caniformia	Canidae		<i>Canis</i>	<i>adustus</i>				KT448271	1
Caniformia	Canidae		<i>Canis</i>	<i>anthus</i>				NC 027956	2
Caniformia	Canidae		<i>Canis</i>	<i>aureus</i>				KT448274	1
Caniformia	Canidae		<i>Canis</i>	<i>latrans</i>				NC 008093	7
Caniformia	Canidae		<i>Canis</i>	<i>lupus</i>	<i>chanco</i>			NC 010340	4
Caniformia	Canidae		<i>Canis</i>	<i>lupus</i>	<i>familiaris</i>			NC 002008	1231
Caniformia	Canidae		<i>Canis</i>	<i>mesomelas</i>				KT448280	1
Feliformia	Felidae	Felinae	<i>Caracal</i>	<i>caracal</i>				NC 028306	1
Feliformia	Felidae	Felinae	<i>Catopuma</i>	<i>badia</i>				NC 028300	1
Feliformia	Felidae	Felinae	<i>Catopuma</i>	<i>temminckii</i>				NC 027115	41
Feliformia	Viverridae	Hemigalinae	<i>Chrotogale</i>	<i>owstoni</i>		T607 = MNHN SH4	Sanger (overlapping PCRs)	MW257222	1
Caniformia	Canidae		<i>Chrysocyon</i>	<i>brachyurus</i>				NC 024172	1
Caniformia	Viverridae	Viverrinae	<i>Civettictis</i>	<i>civetta</i>		GLC19, Gabon	Sanger (overlapping PCRs)	MW257217	1
Feliformia	Viverridae	Viverrinae	<i>Civettictis</i>	<i>civetta</i>				NC 033378	1
Caniformia	Mephitidae		<i>Conepatus</i>	<i>chinga</i>				NC 042596	1
Feliformia	Hyenidae		<i>Crocuta</i>	<i>crocuta</i>				NC 020670	3
Feliformia	Herpestidae	Mungotinae	<i>Crossarchus</i>	<i>platycephalus</i>		C7R66, Cameroon	Sanger (overlapping PCRs)	MW257212	1
Feliformia	Eupleridae	Euplerinae	<i>Cryptoprocta</i>	<i>ferox</i>		MNHN C13; Univ Montpellier T-832; Studbook # 0008	Sanger (overlapping PCRs)	MW257203	1
Caniformia	Canidae		<i>Cuon</i>	<i>alpinus</i>				NC 013445	3
Feliformia	Herpestidae	Herpestinae	<i>Cynictis</i>	<i>penicillata</i>		T375 = SUN-227 Botswana	Sanger (overlapping PCRs)	MW257211	1
Feliformia	Viverridae	Hemigalinae	<i>Cynogale</i>	<i>bennetti</i>				KY117544	1
Caniformia	Phocidae		<i>Cystophora</i>	<i>cristata</i>				NC 008427	1
Feliformia	Viverridae	Hemigalinae	<i>Diplogale</i>	<i>hosei</i>				MH464790	1
Caniformia	Mustelidae	Lutrinae	<i>Enhydra</i>	<i>lutris</i>				NC 009692	1
Caniformia	Phocidae		<i>Eriagnathus</i>	<i>barbatus</i>				NC 008426	1
Caniformia	Otariidae		<i>Eumetopias</i>	<i>jubatus</i>				NC 004030	10
Feliformia	Eupleridae	Euplerinae	<i>Eupleres</i>	<i>goudotii</i>		D128; MNHN TC705; RHT062; UADBA 50125 Madagascar	Sanger (overlapping PCRs)	MW257202	1
Feliformia	Felidae	Felinae	<i>Felis</i>	<i>catus</i>				NC 001700	1
Feliformia	Felidae	Felinae	<i>Felis</i>	<i>chaus</i>				NC 028307	1
Feliformia	Felidae	Felinae	<i>Felis</i>	<i>margarita</i>				NC 028308	1
Feliformia	Felidae	Felinae	<i>Felis</i>	<i>nigripes</i>				NC 028309	1
Feliformia	Felidae	Felinae	<i>Felis</i>	<i>silvestris</i>	<i>lybica</i>			KP202275	3
Feliformia	Eupleridae	Euplerinae	<i>Fossa</i>	<i>fossana</i>		D350; FMNH 171893 Madagascar	illumina (shotgun) MRD = 16	MW257201	1
Feliformia	Herpestidae	Herpestinae	<i>Galerella</i>	<i>sanguinea</i>		T378 = SUN-272 South Africa	Sanger (overlapping PCRs)	MW257224	1
Caniformia	Mustelidae	Galictinae	<i>Galictis</i>	<i>vittata</i>		T412 = TCCV 1997.137 French Guiana	Sanger (overlapping PCRs)	MW257225	1
Feliformia	Eupleridae	Galidiinae	<i>Galidia</i>	<i>elegans</i>		D146; FMNH 173102 Madagascar	illumina (shotgun) MRD = 139	MW257200	1
Feliformia	Eupleridae	Galidiinae	<i>Galidictis</i>	<i>fasciata</i>		D333; FMNH 156652 Madagascar	illumina (shotgun) MRD = 124	MW257199	1
Feliformia	Viverridae	Viverrinae	<i>Genetta</i>	<i>abyssinica</i>				MG489822	1
Feliformia	Viverridae	Viverrinae	<i>Genetta</i>	<i>genetta</i>		T297 = MNHN SPOT-1479-MNHN-ZM-2004-298, France	Sanger (overlapping PCRs)	MW257215	1
Feliformia	Viverridae	Viverrinae	<i>Genetta</i>	<i>servalina</i>				NC 024568	2
Caniformia	Mustelidae	Martinae	<i>Gulo</i>	<i>gulo</i>				NC 009685	3
Caniformia	Phocidae		<i>Halichoerus</i>	<i>grypus</i>				NC 001602	2
Caniformia	Ursidae	Ursinae	<i>Helarctos</i>	<i>malayanus</i>				NC 009968	2
Feliformia	Herpestidae	Mungotinae	<i>Helogale</i>	<i>parvula</i>				SRR7637809*	1
Feliformia	Viverridae	Hemigalinae	<i>Hemigalus</i>	<i>derbyanus</i>				MH464791	1
Feliformia	Herpestidae	Herpestinae	<i>Herpestes</i>	<i>brachyurus</i>				KY117547	1
Feliformia	Herpestidae	Herpestinae	<i>Herpestes</i>	<i>javanicus</i>				NC 006835	1
Feliformia	Herpestidae	Herpestinae	<i>Herpestes</i>	<i>javanicus</i>		T413 = MNHN VV 1999.510, Thailand	Sanger (overlapping PCRs)	MW257214	1
Feliformia	Herpestidae	Herpestinae	<i>Herpestes</i>	<i>naso</i>		C7R110 Cameroon	Sanger (overlapping PCRs)	MW257235	1
Feliformia	Herpestidae	Herpestinae	<i>Herpestes</i>	<i>semitorquatus</i>				MH464789	1
Feliformia	Felidae	Machairodontinae	<i>Homotherium</i>	<i>latidens</i>				MF871702	3
Feliformia	Hyenidae		<i>Hyaena</i>	<i>hyaena</i>				NC 020669	1
Caniformia	Phocidae		<i>Hydrurga</i>	<i>leptonyx</i>				NC 008425	1
Feliformia	Herpestidae	Herpestinae	<i>Ichneumia</i>	<i>albicauda</i>		T603 = DM1100 TC-157, South Africa	Sanger (overlapping PCRs)	MW257213	1
Caniformia	Mustelidae	Galictinae	<i>Ictonyx</i>	<i>striatus</i>		T299 = MNHN SPOT-6901 South Africa	Sanger (overlapping PCRs)	MW257237	1
Feliformia	Felidae	Felinae	<i>Leopardus</i>	<i>colocolo</i>				NC 028314	1
Feliformia	Felidae	Felinae	<i>Leopardus</i>	<i>geoffroyi</i>				NC 028320	1
Feliformia	Felidae	Felinae	<i>Leopardus</i>	<i>guigna</i>				NC 028321	1
Feliformia	Felidae	Felinae	<i>Leopardus</i>	<i>jacobita</i>				NC 028322	1
Feliformia	Felidae	Felinae	<i>Leopardus</i>	<i>pardalis</i>				NC 028315	1
Feliformia	Felidae	Felinae	<i>Leopardus</i>	<i>pardalis</i>	<i>mitis</i>	T262 = MNHN SPOT-4119 French Guiana	Sanger (overlapping PCRs)	MW257208	1
Feliformia	Felidae	Felinae	<i>Leopardus</i>	<i>tigrinus</i>				NC 028317	1
Feliformia	Felidae	Felinae	<i>Leopardus</i>	<i>wiedii</i>				NC 028318	1
Feliformia	Felidae	Felinae	<i>Leptailurus</i>	<i>serval</i>				NC 028316	1
Caniformia	Phocidae		<i>Leptonychotes</i>	<i>weddellii</i>				NC 008424	1
Caniformia	Phocidae		<i>Lobodon</i>	<i>carcinophaga</i>				NC 008423	1
Caniformia	Mustelidae	Lutrinae	<i>Lontra</i>	<i>canadensis</i>				SRR10409165*	1
Caniformia	Mustelidae	Lutrinae	<i>Lutra</i>	<i>lutra</i>				LC050126	1
Caniformia	Mustelidae	Lutrinae	<i>Lutra</i>	<i>lutra</i>				NC 011358	9
Caniformia	Mustelidae	Lutrinae	<i>Lutra</i>	<i>sumatrana</i>				NC 035810	1
Caniformia	Mustelidae	Lutrinae	<i>Lutrogale</i>	<i>perspicillata</i>				NC 035811	1
Caniformia	Canidae		<i>Lycalopex</i>	<i>sechurae</i>				KT448284	1
Caniformia	Canidae		<i>Lycan</i>	<i>pictus</i>				NC 028427	2
Feliformia	Felidae	Felinae	<i>Lynx</i>	<i>canadensis</i>				NC 028313	1
Feliformia	Felidae	Felinae	<i>Lynx</i>	<i>lynx</i>				NC 027083	4
Feliformia	Felidae	Felinae	<i>Lynx</i>	<i>pardinus</i>				NC 028319	161
Feliformia	Felidae	Felinae	<i>Lynx</i>	<i>rufus</i>				NC 014456	3
Caniformia	Mustelidae	Martinae	<i>Martes</i>	<i>americana</i>				NC 020642	1
Caniformia	Mustelidae	Martinae	<i>Martes</i>	<i>flavigula</i>				NC 012141	3
Caniformia	Mustelidae	Martinae	<i>Martes</i>	<i>foina</i>				NC 020643	1
Caniformia	Mustelidae	Martinae	<i>Martes</i>	<i>martes</i>		T302 = MNHN SPOT-1051 Fance	Sanger (overlapping PCRs)	MW257228	3
Caniformia	Mustelidae	Martinae	<i>Martes</i>	<i>melampus</i>				NC 009678	1
Caniformia	Mustelidae	Martinae	<i>Martes</i>	<i>pennanti</i>				NC 020664	16
Caniformia	Mustelidae	Martinae	<i>Martes</i>	<i>zibellina</i>				NC 011579	39
Caniformia	Mustelidae	Melinae	<i>Meles</i>	<i>anakuma</i>				NC 009677	1
Caniformia	Mustelidae	Melinae	<i>Meles</i>	<i>leucurus</i>				NC 039173	4
Caniformia	Mustelidae	Melinae	<i>Meles</i>	<i>meles</i>		T303 = MNHN SPOT-1533	Sanger (overlapping PCRs)	MW257227	3
Caniformia	Mustelidae	Mellivorinae	<i>Mellivora</i>	<i>capensis</i>		T370 = SUN-103 Tanzania	Sanger (overlapping PCRs)	MW257239	1
Caniformia	Mustelidae	Helictidinae	<i>Melagale</i>	<i>moschata</i>	<i>subaurantiaca</i>			KP726273	1
Caniformia	Mustelidae	Helictidinae	<i>Melagale</i>	<i>moschata</i>				NC 020644	1
Caniformia	Ursidae	Ursinae	<i>Melursus</i>	<i>ursinus</i>		V7x35A Vietnam	Sanger (overlapping PCRs)	MW257240	1
Caniformia	Mephitidae		<i>Mephitis</i>	<i>mephitis</i>				NC 009970	2
Caniformia	Phocidae		<i>Mirovanga</i>	<i>angustirostris</i>				SRR10331586*	1
Caniformia	Phocidae		<i>Mirovanga</i>	<i>leonina</i>				NC 008422	1
Caniformia	Phocidae		<i>Monachus</i>	<i>monachus</i>				NC 044972	5

Caniformia	Phocidae		<i>Monachus</i>	<i>schauinslandi</i>				NC 008421	1
Feliformia	Herpestidae	Mungotinae	<i>Mungos</i>	<i>mungo</i>	MNHN C78, Univ. Montpellier T-1112		Sanger (overlapping PCRs)	MW257205	1
Feliformia	Herpestidae	Mungotinae	<i>Mungos</i>	<i>mungo</i>				SRR7704821*	1
Feliformia	Eupleridae	Galidiinae	<i>Mungotictis</i>	<i>decemlineata</i>				NC 027828	1
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>altaica</i>				NC 021751	1
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>erminea</i>	T305 = MNHN SPOT-1142		Sanger (overlapping PCRs)	MW257230	2
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>eversmannii</i>				NC 028013	1
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>frenata</i>				NC 020640	1
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>itarsi</i>				NC 034330	19
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>kathiah</i>				NC 023210	1
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>niagripes</i>				NC 024942	1
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>niivalis</i>	T306 = MNHN SPOT-2728, MNHN-ZM 2004-391, France		Sanger (overlapping PCRs)	MW257229	5
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>putorius</i>				NC 020638	4
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>sibirica</i>				AP017394	11
Caniformia	Mustelidae	Mustelinae	<i>Mustela</i>	<i>sibirica</i>				NC 020637	6
Feliformia	Nandiniidae		<i>Nandinia</i>	<i>binotata</i>				NC 024567	1
Caniformia	Procyonidae		<i>Nasua</i>	<i>nasua</i>				NC 020647	1
Feliformia	Felidae	Pantherinae	<i>Neofelis</i>	<i>nebulosa</i>				NC 008450	3
Caniformia	Phocidae		<i>Neophoca</i>	<i>cinerea</i>				NC 008419	1
Caniformia	Mustelidae	Mustelinae	<i>Neovison</i>	<i>vison</i>				NC 020641	3
Caniformia	Canidae		<i>Nyctereutes</i>	<i>procyonoides</i>				NC 013700	3
Caniformia	Odobenidae		<i>Odobenus</i>	<i>rosmarus</i>				NC 004029	29
Caniformia	Phocidae		<i>Ommatophoca</i>	<i>rassii</i>				RER1	1
Caniformia	Otariidae		<i>Otaria</i>	<i>byronia</i>	OTAB; Parc zoologique de Paris		Sanger (overlapping PCRs)	MW257231	1
Feliformia	Felidae	Felinae	<i>Otocolobus</i>	<i>manul</i>				NC 028323	1
Caniformia	Canidae		<i>Otocyon</i>	<i>megalotis</i>	SAF1 South Africa		Sanger (overlapping PCRs)	MW257223	2
Feliformia	Viverridae	Paradoxurinae	<i>Paguma</i>	<i>larvata</i>	PDS511 Laos		Sanger (overlapping PCRs)	MW257220	2
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>leo</i>	NERO; Parc zoologique de Paris		Ion Torrent (overlapping PCRs) MRD = 211	MW257216	19
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>leo</i>		<i>spelaea</i>		KX258452	2
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>onca</i>				KP202264	2
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>onca</i>				NC 022842	1
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>pardus</i>				NC 010641	5
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>pardus</i>		<i>japonensis</i>		KI866876	8
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>tigris</i>				NC 010642	35
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>tigris</i>		<i>amoyensis</i>		NC 014770	2
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>uncta</i>				KP202269	1
Feliformia	Felidae	Pantherinae	<i>Panthera</i>	<i>uncta</i>				NC 010638	1
Feliformia	Viverridae	Paradoxurinae	<i>Paradoxurus</i>	<i>hermaphroditus</i>				NC 039591	1
Feliformia	Viverridae	Paradoxurinae	<i>Paradoxurus</i>	<i>hermaphroditus</i>	NLNC50 Laos		Sanger (overlapping PCRs)	MW257219	1
Feliformia	Viverridae	Paradoxurinae	<i>Paradoxurus</i>	<i>jerdoni</i>				MH464793	1
Feliformia	Hyainidae		<i>Parahyaena</i>	<i>brunnea</i>				NC 038159	15
Feliformia	Felidae	Pantherinae	<i>Parafelis</i>	<i>marmorata</i>	NLN3 Laos		Sanger (overlapping PCRs)	MW257207	2
Caniformia	Phocidae		<i>Phoca</i>	<i>fasciata</i>				NC 008428	1
Caniformia	Phocidae		<i>Phoca</i>	<i>groenlandica</i>				NC 008429	54
Caniformia	Phocidae		<i>Phoca</i>	<i>largha</i>				NC 008430	1
Caniformia	Phocidae		<i>Phoca</i>	<i>vitulina</i>				NC 001325	1
Caniformia	Otariidae		<i>Phocartos</i>	<i>hookeri</i>				NC 008418	1
Caniformia	Mustelidae	Galictinae	<i>Poecilogale</i>	<i>albinucha</i>	T602 = FMNH 149354 Burundi		Sanger (overlapping PCRs)	MW257232	1
Caniformia	Procyonidae		<i>Potos</i>	<i>flavus</i>	T414 = TCCV 1995.125		Sanger (overlapping PCRs)	MW257234	1
Feliformia	Felidae	Felinae	<i>Prionailurus</i>	<i>bengalensis</i>	KKM45 Cambodia		Sanger (overlapping PCRs)	MW257210	20
Feliformia	Felidae	Felinae	<i>Prionailurus</i>	<i>bengalensis</i>		<i>javansensis</i>		NC 028301	12
Feliformia	Felidae	Felinae	<i>Prionailurus</i>	<i>planiceps</i>				KY682741	4
Feliformia	Felidae	Felinae	<i>Prionailurus</i>	<i>planiceps</i>				NC 028312	6
Feliformia	Felidae	Felinae	<i>Prionailurus</i>	<i>rubiginosus</i>				NC 028304	2
Feliformia	Felidae	Felinae	<i>Prionailurus</i>	<i>viverrinus</i>				NC 028305	1
Feliformia	Prionodontidae		<i>Prionodon</i>	<i>linsang</i>				ERR2391707*	1
Feliformia	Prionodontidae		<i>Prionodon</i>	<i>pardicolor</i>				NC 024569	2
Caniformia	Procyonidae		<i>Procyon</i>	<i>lotor</i>				AB462046	3
Caniformia	Procyonidae		<i>Procyon</i>	<i>lotor</i>				AB462049	4
Feliformia	Felidae	Felinae	<i>Profelis</i>	<i>aurata</i>				NC 028299	1
Feliformia	Hyainidae		<i>Proteles</i>	<i>cristata</i>	T393 = SUN-1172 South Africa		Sanger (overlapping PCRs)	MW257209	6
Feliformia	Felidae	Felinae	<i>Puma</i>	<i>cancolor</i>				NC 016470	22
Feliformia	Felidae	Felinae	<i>Puma</i>	<i>yagouaroundi</i>				NC 028311	1
Caniformia	Phocidae		<i>Pusa</i>	<i>caspiaca</i>				NC 008431	1
Caniformia	Phocidae		<i>Pusa</i>	<i>hispid</i>				NC 008433	1
Caniformia	Phocidae		<i>Pusa</i>	<i>sibirica</i>				NC 008432	2
Feliformia	Eupleridae	Galidiinae	<i>Salanoia</i>	<i>cancolor</i>	D378; MNHN TC-696		illumina (shotgun) MRD = 31	MW257198	1
Feliformia	Felidae	Machairodontinae	<i>Smilodon</i>	<i>papulator</i>				MF871700	1
Caniformia	Canidae		<i>Speothos</i>	<i>venaticus</i>	C48; MNHN TC-034		Sanger (overlapping PCRs)	MW257226	2
Caniformia	Mephitidae		<i>Spilogale</i>	<i>putorius</i>				NC 010497	1
Feliformia	Herpestidae	Mungotinae	<i>Suricata</i>	<i>suricata</i>				MW257236	1
Caniformia	Mustelidae	Taxidiinae	<i>Taxidea</i>	<i>taxus</i>	SSM10 South Africa		Sanger (overlapping PCRs)	NC 020646	1
Caniformia	Ursidae	Tremarctinae	<i>Tremarctos</i>	<i>ornatus</i>				NC 009969	2
Caniformia	Canidae		<i>Urocyon</i>	<i>cinereoragenteus</i>				NC 026723	21
Caniformia	Canidae		<i>Urocyon</i>	<i>littoralis</i>		<i>catalinae</i>		KP129018	15
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>americanus</i>				JX196366	3
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>arctos</i>				AP012576	6
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>arctos</i>				EU497665	29
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>arctos</i>				GU573486	5
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>arctos</i>				GU573491	207
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>arctos</i>	1885 Pakistan		illumina (overlapping PCRs) MRD = 204	MW257206	2
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>arctos</i>		<i>pruinus</i>		MG066703	3
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>maritimus</i>				GU573488	1
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>maritimus</i>				NC 003428	31
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>spelaeus</i>				EU327344	13
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>spelaeus</i>				NC 011112	8
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>thibetanus</i>		<i>formosanus</i>		NC 009331	1
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>thibetanus</i>		<i>laniger</i>		MH281753	2
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>thibetanus</i>		<i>mupinensis</i>		NC 008753	2
Caniformia	Ursidae	Ursinae	<i>Ursus</i>	<i>thibetanus</i>		<i>thibetanus</i>		NC 011118	4
Feliformia	Viverridae	Viverrinae	<i>Viverra</i>	<i>tangalunga</i>				MH464792	1
Feliformia	Viverridae	Viverrinae	<i>Viverra</i>	<i>zibetha</i>	T609 = MNHN SH22		Sanger (overlapping PCRs)	MW257233	1
Feliformia	Viverridae	Viverrinae	<i>Viverricula</i>	<i>indica</i>		<i>rasse</i>		KX891745	1
Feliformia	Viverridae	Viverrinae	<i>Viverricula</i>	<i>indica</i>		<i>indica</i>		KX891751	1
Feliformia	Viverridae	Viverrinae	<i>Viverricula</i>	<i>indica</i>		<i>pallida</i>		NC 025296	2
Caniformia	Canidae		<i>Vulpes</i>	<i>corsac</i>				NC 023958	1
Caniformia	Canidae		<i>Vulpes</i>	<i>ferrilata</i>				NC 027935	1
Caniformia	Canidae		<i>Vulpes</i>	<i>lagopus</i>				NC 026529	3
Caniformia	Canidae		<i>Vulpes</i>	<i>vulpes</i>				NC 008434	5
Caniformia	Canidae		<i>Vulpes</i>	<i>zerda</i>				KJ603240	1
Caniformia	Otariidae		<i>Zalophus</i>	<i>californianus</i>				NC 008416	1
Caniformia	Otariidae		<i>Zalophus</i>	<i>wollebaeki</i>				SRR4431565*	1

* = genomes extracted from SRA data

RERL = AY377132, AY377155, AY377178, AY377201, AY377224, AY377247, AY377269, AY377287, AY377294, AY377316, AY377322, AY377331, AY377349, AY377367, AY377385.

MRD: Mean read depth

TOTAL 2442