

		TAAR3		TAAR4		TAAR5	
		length	source	length	source	length	source
Mammalia Protheria <i>Ornithorhynchus anatinus</i>	platypus	full length	NCBI <i>Ornithorhynchus anatinus</i> trace archive: gnl ti 750149729 and others	full length	NCBI <i>Ornithorhynchus anatinus</i> trace archive: gnl ti 1246961726 and others		
Metatheria <i>Monodelphis domestica</i> *	gray short-tailed opossum	full length	NCBI <i>Monodelphis domestica</i> trace archive: gnl ti 397122803 and others	full length 3x	NCBI <i>Monodelphis domestica</i> trace archive: gnl ti 473024684 and others	full length	NCBI <i>Monodelphis domestica</i> trace archive: gnl ti 343429597 and others
<i>Macropus eugenii</i>	tammar wallaby	full length	NCBI <i>Macropus eugenii</i> trace archive: gnl ti 1378047881 and others	full length	NCBI <i>Macropus eugenii</i> trace archive: gnl ti 1275406430 and others	aa8-end	NCBI <i>Macropus eugenii</i> trace archive: gnl ti 976302676
Eutheria Afrotheria <i>Procavia capensis</i> *	cape rock hyrax	full length	NCBI <i>Procavia capensis</i> trace archive: gnl ti 1203593751 and others	full length 3x	NCBI accession: FJ372519, NCBI <i>Procavia capensis</i> trace archive: gnl ti 1203477241 and others	full length	NCBI <i>Procavia capensis</i> trace archive: gnl ti 1295000815 and others
<i>Loxodonta africana</i> *	African savanna elephant	full length	NCBI <i>Loxodonta africana</i> trace archive: gnl ti 1714433321 and others	full length 2x	NCBI accession: FJ372488 and NCBI <i>Loxodonta africana</i> trace archive: gnl ti 1695377756 and others	full length	NCBI <i>Loxodonta africana</i> trace archive: gnl ti 1865757347 and others
<i>Elephas maximus</i>	asiatic elephant			aa63-317	NCBI accession: FJ372465		
<i>Trichechus manatus</i>	Caribbean manatee			aa13-315 (P)	NCBI accession: FJ372528		
<i>Echinops telfairi</i> *	lesser hedgehog tenrec	full length	NCBI <i>Echinops telfairi</i> trace archive: gnl ti 682625873 and others	full length 2x (1P)	NCBI <i>Echinops telfairi</i> trace archive: gnl ti 688316620 and others	full length	NCBI <i>Echinops telfairi</i> trace archive: gnl ti 659227110 and others
<i>Orycteropus afer</i>	aardvark			aa14-310	NCBI accession: FJ372504, FJ375205		

<i>Xenarthra</i> <i>Bradypus tridactylus</i>	pale-throated sloth			aa14-299	NCBI accession: FJ372454		
<i>Dasyopus novemcinctus</i> *	nine-banded Armadillo	full length	NCBI <i>Dasyopus novemcinctus</i> trace archive: gnl ti 601523115 and others	full length	NCBI <i>Dasyopus novemcinctus</i> trace archive: gnl ti 567276505 and others	full length	NCBI <i>Dasyopus novemcinctus</i> trace archive: gnl ti 1810404270 and others
<i>Choloepus hoffmanni</i>	Hoffmann's two-fingered sloth	aa1-87 and aa219-end	NCBI <i>Choloepus hoffmanni</i> trace archive: gnl ti 1316582719 and others	full length	NCBI <i>Choloepus hoffmanni</i> trace archive: gnl ti 1357779584 and others	full length	NCBI <i>Choloepus hoffmanni</i> trace archive: gnl ti 1315053175 and others
<hr style="border-top: 1px dashed black;"/>							
<i>Laurasiatheria</i> <i>Insectivora</i> <i>Erinaceus concolor</i>	eastern European hedgehog			aa62-312	NCBI accession: FJ372468		
<i>Erinaceus europaeus</i>	western European hedgehog	aa53-end	NCBI <i>Erinaceus europaeus</i> trace archive: gnl ti 910108268 and others	full length 2x (1P)	NCBI <i>Erinaceus europaeus</i> trace archive: gnl ti 932971697 and others	full length	NCBI <i>Erinaceus europaeus</i> trace archive: gnl ti 970975651 and others
<i>Sorex araneus</i> *	European shrew	full length	NCBI <i>Sorex araneus</i> trace archive: gnl ti 885213269 and others	full length 2x (1P)	NCBI <i>Sorex araneus</i> trace archive: gnl ti 893813953 and others	full length	NCBI <i>Sorex araneus</i> trace archive: gnl ti 892168220 and others
<i>Talpa europaea</i>	European mole			aa60-259	NCBI accession: FJ372525		
<i>Chiroptera</i> <i>Pteropus sp.</i>	flying fox			aa14-303	NCBI accession: FJ372520		
<i>Pteropus vampyrus</i>	large flying fox	aa1-140 and aa284-end	NCBI <i>Pteropus vampyrus</i> trace archive: gnl ti 1399038458 and others	full length	NCBI <i>Pteropus vampyrus</i> trace archive: gnl ti 1329134482 and others	full length	NCBI <i>Pteropus vampyrus</i> trace archive: gnl ti 1384511508 and others
<i>Myotis albescens</i>	silver-tipped myotis			aa9-322	NCBI accession: FJ372498		
<i>Myotis lucifugus</i> *	little brown bat	full length	NCBI <i>Myotis lucifugus</i> trace archive: gnl ti 1912741925 and others	full length	NCBI <i>Myotis lucifugus</i> trace archive: gnl ti 1899487221 and others	full length	NCBI <i>Myotis lucifugus</i> trace archive: gnl ti 1895512953 and others

<i>Rhogeessa io</i>	Thomas's yellow bat			aa14-312	NCBI accession: FJ372522		
<i>Cetartiodactyla</i>							
<i>Hexaprotodon liberiensis</i>	pygmy hippopotamus			aa13-315	NCBI accession: FJ372475		
<i>Bos taurus</i> *	cattle	full length	NCBI accession: FJ372446 and NCBI <i>Bos taurus</i> trace archive: gnl ti 501216465 and others	full length	NCBI <i>Bos taurus</i> trace archive: gnl ti 620739238 and others	full length	NCBI accession: FJ372540 and NCBI <i>Bos taurus</i> trace archive: gnl ti 508561082 and others
<i>Bison bonasus</i>	European bison			aa100-290	NCBI accession: FJ372453		
<i>Ovis aries</i>	sheep			aa14-304	NCBI accession: FJ372507		
<i>Ovibos moschatus</i>	muskox			aa71-312	NCBI accession: FJ372506		
<i>Hippotragus niger</i>	sable antelope			aa42-314	NCBI accession: FJ372476		
<i>Cervus elaphus</i>	red deer			aa14-304	NCBI accession: FJ372462		
<i>Giraffa camelopardalis</i>	giraffe			aa67-312	NCBI accession: FJ372472		
<i>Sus scrofa</i> *	boar	full length	NCBI <i>Sus scrofa</i> trace archive: gnl ti 1420532685 and others	full length	NCBI <i>Sus scrofa</i> trace archive: gnl ti 1579919251 and others	full length	NCBI <i>Sus scrofa</i> trace archive: gnl ti 1579918704 and others
<i>Camelus bactrianus</i>	bactrian camel			aa75-312	NCBI accession: FJ372455		
<i>Vicugna vicugna</i>	Vicugna	full length	NCBI <i>Vicugna vicugna</i> trace archive: gnl ti 1983213061 and others	full length	NCBI <i>Vicugna vicugna</i> trace archive: gnl ti 1963834526 and others	aa28-end	NCBI <i>Vicugna vicugna</i> trace archive: gnl ti 1930070997 and others
<i>Perissodactyla</i>							
<i>Equus caballus</i> *	horse	full length	NCBI <i>Equus caballus</i> trace archive: gnl ti 1232113054 and others	full length	NCBI <i>Equus caballus</i> trace archive: gnl ti 1234728610 and others	full length 2x	NCBI <i>Equus caballus</i> trace archive: gnl ti 1204042749 and others
<i>Equus przewalskii</i>	Przewalski horse			aa10-335	NCBI accession: FJ372466, FJ372467		
<i>Ceratotherium simum</i>	white rhinoceros			aa13-306	NCBI accession: FJ372460		

<i>Tapirus sp.</i>	tapir			aa13-314	NCBI accession: FJ372526, FJ372527		
<i>Carnivora</i>							
<i>Feliformia</i>							
<i>Hyaena hyaena</i>	striped hyena			aa21-304	NCBI accession: FJ372479		
<i>Felis catus</i>	cat	aa106-end	NCBI <i>Felis catus</i> trace archive: gnl ti 652118115 and others	full length	NCBI accession: FJ372470 and NCBI <i>Felis catus</i> trace archive: gnl ti 965531899 and others	full length	NCBI <i>Felis catus</i> trace archive: gnl ti 653605578 and others
<i>Acinonyx jubatus</i>	cheetah			aa14-312	NCBI accession: FJ372449		
<i>Panthera leo</i>	lion			aa15-316	NCBI accession: FJ372508		
<i>Panthera onca</i>	jaguar			aa15-314	NCBI accession: FJ372509		
<i>Panthera tigris</i>	tiger			aa14-312	NCBI accession: FJ372510		
<i>Uncia uncia</i>	snow leopard			aa21-312	NCBI accession: FJ372530, FJ372531		
<i>Carniformia</i>							
<i>Zalophus californianus</i>	California sea lion			aa13-317 (P)	NCBI accession: FJ372538		
<i>Phoca sibirica</i>	Baikal seal			aa12-307	NCBI accession: FJ372516		
<i>Nasua nasua</i>	ring-tailed coati			aa12-318	NCBI accession: FJ372499		
<i>Mustelidae</i>							
<i>Lutra lutra</i>	Eurasian river otter			aa13-314	NCBI accession: FJ372489, FJ372490		
<i>Martes foina</i>	beach marten			aa13-314	NCBI accession: FJ372494		
<i>Ursidae</i>							
<i>Ailuropoda melanoleuca</i>	giant panda			aa12-315	NCBI accession: FJ372450		
<i>Ursus malayanus</i>	Malayan sun bear			aa12-312	NCBI accession: FJ372534		
<i>Ursus americanus</i>	American black bear			aa12-310	NCBI accession: FJ372532		
<i>Ursus arctos</i>	brown bear			aa12-299	NCBI accession: FJ372533		
<i>Ursus maritimus</i>	polar bear			aa12-310	NCBI accession: FJ372535		

<i>Canidae</i> <i>Canis lupus</i> <i>Canis familiaris</i>	gray wolf			aa13-300	NCBI accession: FJ372457		
	dog			full length	NCBI accession: FJ372456 and NCBI <i>Canis familiaris</i> trace archive: gnl ti 302723376 and others	full length	NCBI accession: FJ372543 and NCBI <i>Canis familiaris</i> trace archive: gnl ti 290457734 and others
<i>Nyctereutes procyonoides</i>	raccoon dog			aa14-312	NCBI accession: FJ372500		
<i>Vulpes vulpes</i>	red fox			aa14-312	NCBI accession: FJ372537		
<i>Euarchontoglires</i> <i>Scandentia</i> <i>Tupaia belangeri</i>	northern tree shrew	aa1-216	NCBI <i>Tupaia belangeri</i> trace archive: gnl ti 1069820554 and others	full length 2x	NCBI accession: FJ372529 and NCBI <i>Tupaia belangeri</i> trace archive: gnl ti 1046628937 and others	aa204-end	NCBI <i>Tupaia belangeri</i> trace archive: gnl ti 1072248002 and others
<i>Glires</i> <i>Lagomorpha</i> <i>Ochotonidae</i> <i>Ochotona princeps</i>	american Pika	full length (P)	NCBI <i>Ochotona princeps</i> trace archive: gnl ti 1535960125 and others	aa177-end	NCBI <i>Ochotona princeps</i> trace archive: gnl ti 1539847207 and others	full length	NCBI <i>Ochotona princeps</i> trace archive: gnl ti 1528160173 and others
<i>Leporidae</i> <i>Oryctolagus cuniculus</i> *	european rabbit	full length	NCBI <i>Oryctolagus cuniculus</i> trace archive: gnl ti 1992167154 and others	full length	NCBI <i>Oryctolagus cuniculus</i> trace archive: gnl ti 638702844 and others	full length	NCBI <i>Oryctolagus cuniculus</i> trace archive: gnl ti 621098157 and others
<i>Rodentia</i> <i>Hystricognathi</i> <i>Cavia porcellus</i> *	domestic guinea pig	full length	NCBI <i>Cavia porcellus</i> trace archive: gnl ti 1653413717 and others	full length 2x	NCBI <i>Cavia porcellus</i> trace archive: gnl ti 1596694171 and others	full length 3x (2P)	NCBI <i>Cavia porcellus</i> trace archive: gnl ti 1633904227 and others
<i>Octodontomys gliroides</i>	Mountain Degu			aa33-307	NCBI accession: FJ372502		

<i>Sciurognathi</i> <i>Dipodomys ordii</i>	Ord's kangaroo rat	aa41-303	NCBI <i>Dipodomys ordii</i> trace archive: gnl ti 1569585119 and others	full length	NCBI <i>Dipodomys ordii</i> trace archive: gnl ti 1586901258 and others	full length	NCBI <i>Dipodomys ordii</i> trace archive: gnl ti 1558832023 and others
<i>Ondatra zibethicus</i>	muskrat			aa14-296	NCBI accession: FJ372503		
<i>Meriones meridianus</i>	mid-day jird			aa12-311	NCBI accession: FJ372495		
<i>Meriones unguiculatus</i>	Mongolian gerbil			aa12-311	NCBI accession: FJ372496		
<i>Mus musculus</i> *	house mouse	full length	NCBI accession: FJ372434, NM_001008429	full length	NCBI accession: FJ372497, NM_001008499	full length	NCBI accession: FJ372555, NM_001009574
<i>Rattus norvegicus</i> *	Norway rat	full length	NCBI accession: FJ372433, NM_001009532	full length	NCBI accession: FJ372521, NM_175583	full length	NCBI accession: FJ372562, NM_001009650
<i>Spermophilus tridecemlineatus</i>	thirteen-lined ground squirrel	full length	NCBI <i>Spermophilus tridecemlineatus</i> trace archive: gnl ti 1001097323 and others	aa221-end	NCBI <i>Spermophilus tridecemlineatus</i> trace archive: gnl ti 1020590663	aa118-end	NCBI <i>Spermophilus tridecemlineatus</i> trace archive: gnl ti 1001118269 and others
Primates <i>Strepsirrhini</i> <i>Chiromyiformes</i> <i>Nycticebus bengalensis</i>	Bengal slow loris			aa44-312	NCBI accession: FJ372501		
<i>Lemuriformes</i> <i>Microcebus murinus</i>	gray mouse lemur	full length	NCBI <i>Microcebus murinus</i> trace archive: gnl ti 1556207801 and others	full length	NCBI <i>Microcebus murinus</i> trace archive: gnl ti 1563038889 and others	full length	NCBI <i>Microcebus murinus</i> trace archive: gnl ti 1570525518 and others
<i>Lemur catta</i>	ring-tailed lemur	aa75-330	NCBI accession: FJ931108	aa14-315	NCBI accession: FJ372486, FJ372487	aa8-333	NCBI accession: FJ372554
<i>Varecia variegata</i>	ruffed lemur			aa12-299	NCBI accession: FJ372536		

<i>Lorisiformes</i> <i>Otolemur garnettii</i>	small-eared galago	full length	NCBI <i>Otolemur garnettii</i> trace archive: gnl ti 1095202340 and others	aa42-end	NCBI <i>Otolemur garnettii</i> trace archive: gnl ti 2016312907 and others	aa19-end	NCBI <i>Otolemur garnettii</i> trace archive: gnl ti 1094613047 and others
<i>Galago moholi</i>	South African galago			aa158-311	NCBI accession: FJ372471		
<i>Haplorrhini</i> <i>Tarsiiformes</i> <i>Tarsius syrichta</i>	Philippine tarsier	full length	NCBI <i>Tarsius syrichta</i> trace archive: gnl ti 1551473575 and others	full length	NCBI <i>Tarsius syrichta</i> trace archive: gnl ti 1546582642 and others	full length (P)	NCBI <i>Tarsius syrichta</i> trace archive: gnl ti 1496118726 and others
<i>Simiiformes</i> <i>Platyrrhini</i> <i>Aotidae</i> <i>Aotus azarai</i>	Azara's Night Monkey	aa34-326	NCBI accession: FJ931100	aa26-312	NCBI accession: FJ372451	aa16-321	NCBI accession: FJ931101
<i>Atelidae</i> <i>Lagothrix lagotricha</i>	common woolly monkey	aa21-336 (P)	NCBI accession: FJ931109	aa14-316	NCBI accession: FJ372485	aa28-320	NCBI accession: FJ931110
<i>Ateles fusciceps</i>	brown-headed spider monkey	aa28-327	NCBI accession: FJ931102	aa1-314	NCBI accession: FJ372452	aa28-320	NCBI accession: FJ931103
<i>Ateles geoffroyi</i>	black-handed spider monkey	aa18-340	NCBI accession: FJ931104	aa40-314	NCBI accession: FJ931105	aa19-end	NCBI accession: FJ931106
<i>Cebidae</i> <i>Callithrix jacchus</i>	common marmoset	full length (P)	NCBI <i>Callithrix jacchus</i> trace archive: gnl ti 1129809010 and others	full length (P)	NCBI <i>Callithrix jacchus</i> trace archive: gnl ti 1133228298 and others	full length	NCBI <i>Callithrix jacchus</i> trace archive: gnl ti 1143837426 and others
<i>Callithrix geoffroyi</i>	Geoffroy's marmoset	aa16-340 (P)	NCBI accession: FJ372447, FJ372448	aa11-320 (P)	NCBI accession: FJ931107	aa6-end	NCBI accession: FJ372541, FJ372542
<i>Saguinus imperator</i>	emperor tamarin	aa18-342 (P)	NCBI accession: FJ372426, FJ372427	aa12-313 (1P)	NCBI accession: FJ931111, FJ931112	aa29-318	NCBI accession: FJ931113
<i>Cebus apella</i>	tufted capuchin			aa26-296	NCBI accession: FJ372458, FJ372459		

<i>Saimiri sciureus</i>	common squirrel monkey	aa74-327	NCBI accession: FJ931114	full length	NCBI accession: FJ372523, FJ372524 and EF549700	aa16-329	NCBI accession: FJ931115
<i>Catarrhini</i> <i>Cercopithecoidea</i> <i>Erythrocebus</i> <i>patas</i>	patas monkey	aa15-340	NCBI accession: FJ372444, FJ372445	aa11-315	NCBI accession: FJ372469	aa20-end	NCBI accession: FJ372544
<i>Macaca mulatta</i>	rhesus monkey	full length	NCBI accession: FJ372435, FJ372436 and NCBI <i>Macaca mulatta</i> trace archive: gn ti 376527395 and others	full length	NCBI accession: FJ372491, FJ372492 and NCBI <i>Macaca mulatta</i> trace archive: gn ti 486761772 and others	full length	NCBI <i>Macaca mulatta</i> trace archive: gn ti 349474498 and others
<i>Macaca fascicularis</i>	crab-eating Macaque	aa88-340	NCBI accession: FJ372437				
<i>Mandrillus sphinx</i>	mandrill			aa12-312	NCBI accession: FJ372493		
<i>Papio hamadryas</i>	hamadryas baboon	full length	NCBI accession: FJ372430, FJ372431 and NCBI <i>Papio hamadryas</i> trace archive: gn ti 2010511994 and others	full length	NCBI accession: FJ372515, FJ372539 and NCBI <i>Papio hamadryas</i> trace archive: gn ti 1959076673 and others	full length	NCBI accession: FJ372558, FJ372559 and NCBI <i>Papio hamadryas</i> trace archive: gn ti 1998875785 and others
<i>Cercopithecus aethiops</i>	African green monkey			aa26-221	NCBI accession: FJ372461		
<i>Colobus guereza</i>	guereza			aa10-314	NCBI accession: FJ372463, FJ372464		
<i>Hominoidea</i> <i>Hylobatidae</i> <i>Hylobates lar</i>	white-handed gibbon	aa16-337 (P)	NCBI accession: FJ372440, FJ372441	aa18-314	NCBI accession: FJ372481	aa14-end (P)	NCBI accession: FJ372549, FJ372550
<i>Nomascus gabriellae</i>	red-cheeked Gibbon			aa11-322 (P)	NCBI accession: FJ372480	aa16-323 (P)	NCBI accession: FJ372548

<i>Nomascus leucogenys</i>	white-cheeked Gibbon			full length (P)	NCBI accession: FJ372482, FJ372483 and NCBI <i>Nomascus leucogenys</i> trace archive: gnl ti 2088070237 and others	full length (P)	NCBI accession: FJ372551 and NCBI <i>Nomascus leucogenys</i> trace archive: gnl ti 2092296901 and others
<i>Symphalangus syndactylus</i>	siamang	aa16-340 (P)	NCBI accession: FJ372438, FJ372439	aa12-317	NCBI accession: FJ372484	aa9-334	NCBI accession: FJ372552, FJ372553
<i>Hominidae</i> <i>Gorilla gorilla</i>	Western Gorilla	aa15-end (P)	NCBI accession: FJ372442, FJ372443 and NCBI <i>Gorilla gorilla</i> trace archive: gnl ti 1669650693 and others	full length (P)	NCBI accession: FJ372473, FJ372474 and NCBI <i>Gorilla gorilla</i> trace archive: gnl ti 2033155805 and others	full length	NCBI accession: FJ372545, FJ372546 and NCBI <i>Gorilla gorilla</i> trace archive: gnl ti 1688237874 and others
<i>Homo sapiens</i>	human	full length (P)	NCBI accession: NG_002481	full length (P)	NCBI accession: FJ372477, FJ372478, NG_004855	full length	NCBI accession: FJ372547, NM_003967
<i>Pan paniscus</i>	bonobo			aa29-313 (P)	NCBI accession: FJ372511, FJ372512		
<i>Pan troglodytes</i>	chimpanzee	full length (P)	NCBI accession: FJ372432, NG_004781	full length (P)	NCBI accession: FJ372513, FJ372514, AY702310	full length	NCBI accession: FJ372556, FJ372557, NM_001009126
<i>Pongo pygmaeus</i>	orangutan	full length (P)	NCBI accession: FJ372428, FJ372429 and NCBI <i>Pongo pygmaeus abelii</i> trace archive: gnl ti 940938990 and others	full length (P)	NCBI accession: FJ372517, FJ372518 and NCBI <i>Pongo pygmaeus abelii</i> trace archive: gnl ti 886956191 and others	full length	NCBI accession: FJ372560, FJ372561 and NCBI <i>Pongo pygmaeus abelii</i> trace archive: gnl ti 1000874246 and others
<i>Sauropsida</i> <i>Anolis carolinensis</i>	green anole					full length	NCBI <i>Anolis carolinensis</i> trace archive: gnl ti 1368146017 and others

<i>Gallus gallus</i>	chicken					full length	NCBI <i>Gallus gallus</i> trace archive: gn ti 282469281 and others
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Abbreviations: aa amino acid, (P) pseudogene, 14 sequences used for mammalian tree (Figure S2 and S7) are depicted with *