

Table S1. List of DNA specimens used in study

Code name	Genus	Species	Subspecies	Common name	Additional ID	Gender	Captive/wild caught/born to wild caught	Geographic origin and sample origin	Sample contributor/acknowledgement	Previous genetic information on the sample
ABE-1	Alouatta	helzebul		red-handed howler monkey	AB/S/N	M	unknown	Centro Nacional de Primatas	H. Seunaez	
ABZ-1	Ateles	helzebuth		white-fronted Spider Monkey	OR126	M		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder	
ACA-3	Alouatta	caraya		black howler monkey	2	M	wild caught	UHE-Serra da Mesa; Goias state, Brazil; Instituto national de Cancer - Genetics Division	Universidade Federal do Pará - Laboratório de Polimorfismos de DNA	
ACL-1	Arctocebus	calabarensis		Calabar angwantibo	A1	U	wild caught	National Museums Scotland, Great Britain	A. Kitchener	Roos et al. 2004, PNAS
ACM-1	Ateles	chamek		Peruvian spider monkey, Chamek spider monkey	822	M	captive born	Zoo de Doue la Fontaine, France	B. Lefaux	no
AFC-7	Ateles	fusciceps		spider monkey	653	M	captive born	Landau Zoo, Germany	I.-O. Heckel	no
AGO-2	Ateles	geoffroyi		black-handed spider monkey	Caleb	M	captive	Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke	
AHY-1	Ateles	hybridus		variegated spider monkey, hybrid spider monkey	466	M	wild caught	Erfurt Zoo, Germany	M. Melcher	no
ALM-1	Aotus	lemurinus	griseimembra	lemurine night monkey (Panamanian night monkey)	OR571	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder	
ALN-1	Avahi	laniger		woolly lemur	1057	M	wild	Sainte Luce, Madagascar	Y. Rumpler	Zaramody et al. 2006, Primate Report
ANA-1	Aotus	nancymaeae		Nancy Ma's Night Monkey, douroucouli	KB9130	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Leona Chemnick	
ANI-1	Allenopithecus	nigroviridis		Allen's swamp monkey	PR00198	F		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US	
APC-1	Ateles	paniscus		black spider monkey		M	captive	Fundação RioZoo		72 genes mapped to this animal
APL-1	Alouatta	palliat		hantled howler honkey	KB7527	M		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Leona Chemnick	
ASA-1	Alouatta	sara		Bolivian red howler	OR749	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder	
ATR-1	Aotus	trivirgatus		owl monkey	ATCC #: CRL1556	U	unknown	ATCC		
AZA-1	Aotus	azarae		Southern owl Monkey	664	M	captive born	Gettorf Zoo, Germany	U. Traxel	no
AZB-1	Aotus	azarae	boliviensis	feline night monkey	9	M	born to wild caught	Instituto nacional de Cancer - Genetics Division	Centro Nacional de Primatas	
AZI-1	Aotus	azarae	infulatus	feline night monkey	10	M	wild caught	UHE - Tucuruí, para state, Brazil; Instituto nacional de Cancer - Genetics Division	Centro Nacional de Primatas	
BAR-1	Brachyteles	arachnoides		muriqui	15	M	wild caught	Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
BHY-1	Brachyteles	hypoxanthus		spider monkey	13	F	wild caught	Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
CAB-1	Cercopithecus	albogularis	kolbi	Kolb's guenon	OR394	M		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder	
CAC-1	Cercocebus	agilis		mangabey	PR00608	F		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US	
CAE-4	Chlorocebus	cynosuros		malbrouck	M Vervet	M		Africa, Botswana, Makgadikgadi National Park	Melody Roelke	
CAE-8	Chlorocebus	aethiops		grivet monkey	CAE	M	captive born	Serengeti Park Hodenhagen, Germany	M. Boer	Roos, unpublished
CAI-1	Callithrix	aurita		white-eared marmoset	28	M	born to wild caught	Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
CAM-1	Cacajao	melanocephalus		black uakari	17	F	captive	Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
CAN-1	Colobus	angolensis	palliat	Eastern Angolan colobus	PR00099	M		Coriell Cell Repositories	Coriell Cell Repositories	
CAP-13	Cebus	apella		brown capuchin monkey	Raviote "Ole"	M		Catoctin Wildlife Park and Zoo, Thumont, MD, US	Melody Roelke	
CAR-1	Mico	argentata	argentata	bare-ear marmoset	N-17173	F	wild	probably provided by Dr Horacio Schneider, Universidade Federal do Pará Belem, Pará	probably provided by Dr Horacio Schneider, Universidade Federal do Pará Belem, Pará	
CAS-1	Cercopithecus	ascanius	schmidti	black-cheeked white-nosed monkey	PR00566	M		Coriell Cell Repositories	Oliver Ryder	
CBS-1	Callicebus	brunneus		brown titi monkey	2360	M	wild caught	Jamari River, Rondônia State, Brazil; Universidade Federal do Pará - Laboratório de Polimorfismos de DNA	Universidade Federal do Pará - Laboratório de Polimorfismos de DNA	
CCE-1	Cercopithecus	cephus		mustached guenon	PR00531	M		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US	
CCG-1	Callicebus	caligatus		chestnut-bellied Titi	KB4245	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder	
CCL-1	Cacajao	calvus		red uakari	743	M	wild caught	Köln Zoo, Germany	U. Ruempler	Osterholz et al. 2009 MPE
CCO-1	Callicebus	coimbrai		titi monkeys	18	F	wild caught	Bahia state, Brazil; Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
CCP-3	Cebus	capucinus		white-faced capuchin	Shelby	M		Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke	
CCU-2	Callicebus	cupreus		red titi, copper titi	CCUP1	M	captive born	La Vallee des Signes, France	J. Vermeer	Osterholz et al. 2009 MPE
CCY-1	Cercocebus	chrysogaster		golden-bellied mangabey	214	F	parents wild caught	Wuppertal Zoo, Germany	G. Olbricht	no
CDA-3	Cercopithecus	diana		Diana monkey	1001	M	captive born	Gettorf Zoo, Germany	U. Traxel	no
CDO-1	Callicebus	donacophilus		white-eared titi, Bolivian titi	KB6580	M		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder	
CEA-1	Cebus	albifrons		white-fronted capuchin	36	M	wild caught	Barcelos, Amazonas State, Brazil; Instituto nacional de Cancer - Genetics Division	Instituto Nacional de Cancer, Genetics Division	

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CGE-4	Callithrix	geoffroyi		Geoffroy's marmoset	325	F	captive born	Dresden Zoo, Germany	H. Will	no
CGO-1	Callimico	geoldii		Geoldi's monkey		M	birth: unknown; currently captive	National Zoological Park, DC, US	Dr. Mitchell Bush	
CGU-7	Colobus	guereza		pied black colobus	333	M	captive born	Köln Zoo, Germany	U. Ruempler	Osterholz et al. 2008 BMC Evol Biol
CHH-1	Cercopithecus	hamlyni	hamlyni	Hamlyn's Guenon	KB10153	M		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder	
CIH-1	Cercopithecus	lhoesti		L'Hoest's monkey	PR00283	M		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US	
CIS-1	Chirotopes	israelita		brown-backed bearded saki	46	M	wild caught	Barcelos, Amazonas State, Brazil; Instituto nacional de Cancer - Genetics Division	Instituto Nacional de Cancer, Genetics Division	
CIA-1	Callithrix	jacchus		common marmoset		M	wild		H. Seunaz	
CKU-1	Callithrix	kuhlii		Weid's black-tufted-ear marmoset	31	M	captive	Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
CLP-1	Callicebus	personatus		masked titi	25	F	wild caught	Espirito Santo State, Brazil; Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
CMD-1	Cheirogaleus	medius		dwarf fat-tailed lemur	Dwarf Fat-tail lemur	F	captive born	Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke	
CMH-1	Callicebus	moloch		dusky titi monkey	21	F	captive	Instituto nacional de Cancer - Genetics Division	Centro Nacional de Primatas	
CMJ-3	Microcebus	minuscule	subspecies 1	small iron-gray dwarf lemur	T019	U	captive born	Frankfurt Zoo, Germany	B. Geyer	Roos, unpublished
CMO-2	Cercopithecus	mona		Mona monkey	256	M	captive born	Lisbon Zoo, Portugal	E. Bairoa Ruivo	Roos, unpublished
CMT-1	Cercopithecus	mitis		blue monkey	017	F	captive born	Amsterdam Zoo, Netherlands	D. Dekker	no
CNE-1	Cercopithecus	neglectus		De Brazza's Monkey	217	M	captive born	Leipzig Zoo, Germany	K. Eulenberger	no
CNI-1	Callicebus	nigrifrons		southern masked titi	23	M	wild caught	Carangola, Minas Gerais State, Brazil; Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
COV-1	Cebus	olivaceus		weeper capuchin	110	F	captive born	Dortmund Zoo, Germany	C. Osmani	no
CPE-10	Callithrix	penicillata		black ear-tufted colobus		M		Bahia, Brazil	Itapu, Brazil, Foz de Iguazu	
CPO-2	Colobus	polykomos		black colobus	371	U	wild caught	Erfurt Zoo, Germany	M. Melcher	Roos, unpublished
CPP-1	Cercopithecus	petaurista	petaurista	lesser white-nosed monkey	PR00762	M		Coriell Cell Repositories, NJ, US	Oliver Ryder	
CPY-5	Cebuella	pygmaea		pygmy marmoset	274	M	captive born	Köln Zoo, Germany	U. Ruempler	Osterholz et al. 2009 MPE
CRO-1	Cebus	robustus		capuchin	41	F	captive	Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro	
CSA-2	Chirotopes	satanas	chirotopes	bearded saki, capuchin monkey	ADA	F	unknown	Rio de Janeiro Zoo		
CSB-1	Chlorocebus	sabaeus		green monkey	Isaac	M		Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke	
CTR-1	Cercocebus	torquatus		red-capped mangabey	OR538	M		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder	
CVA-5	Galeopterus	variegatus		colugo	G	M	wild born	Singapore Zoological Gardens	Paolo Martelli	
CVO-1	Cynocephalus	volans		Philippine colugo	1442 L	U		Philippines	Lawrence Heaney, Eduardo Eizirik	
CWW-1	Cercopithecus	wolfi	wolfi	Wolf's guenon	PR00486	F		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US	
CXA-1	Cebus	xanthosternus		golden-bellied capuchin	1002	F	captive born	La Vallee des Signes, France	J. Vermeer	Roos, unpublished
DMD-5	Daubentonia	madagascariensis		aye-aye	DLC ID-6202; Poe	M	wild caught animal	Duke Lemur Center	Julie Horvath, Duke Lemur Center	no
ECR-2	Eulemur	coronatus		crowned lemur	DLC ID-6478	M	captive	Duke Lemur Center	Julie Horvath, Duke Lemur Center	Horvath et al 2008
EFL-15	Eulemur	collaris		collared brown lemur	DLC ID-5776	F	captive	Duke Lemur Center	Julie Horvath, Duke Lemur Center	Horvath et al 2008
EFL-16	Eulemur	sanfordi		Sanford's brown lemur	DLC ID-6386	F	captive	Duke Lemur Center	Julie Horvath, Duke Lemur Center	Horvath et al 2008
EFL-4	Eulemur	fulvus		brown lemur	DLC ID-6123	F	captive	Duke Lemur Center	Julie Horvath, Duke Lemur Center	Horvath et al 2008
EFL-7	Eulemur	albifrons		white-fronted brown lemur	DLC ID-5547	F	captive	Duke Lemur Center	Julie Horvath, Duke Lemur Center	Horvath et al 2008
EMC-1	Eulemur	macaco		black lemur	277	M	captive born	Köln Zoo, Germany	U. Ruempler	Roos, unpublished
EMC-5	Eulemur	macaco	flavifrons	blue eyed black lemur	DLC ID-6288	M	captive	Duke Lemur Center	Julie Horvath, Duke Lemur Center	Horvath et al 2008
EMO-1	Eulemur	mongoz		mongoose lemur	358	M	wild caught	Köln Zoo, Germany	U. Ruempler	Roos, unpublished
EPA-9	Erythrocebus	patas		patas monkey	928	M	captive born	La Vallee des Signes, France	J. Vermeer	no
ERB-4	Eulemur	rubriventer		red-bellied lemur	DLC ID-6038	F	wildcaught	Duke Lemur Center	Julie Horvath, Duke Lemur Center	Horvath et al 2008
ERF-1	Eulemur	rufus		red-fronted lemur	356	M	captive born	Köln Zoo, Germany	U. Ruempler	Roos, unpublished
GGO-9	Gorilla	gorilla		Western lowland gorilla	107809; Gus	M	captive born	captive born at Bronx Zoo, US; National Zoological Park, DC, US	Dr. Mitchell Bush	
GGR-2	Otolemur	garnettii		bushbaby	KIM	F	birth: unknown; currently captive	Biosphere 2 Oracle, AZ, US	Stephen O'Brien	
GMO-4	Galago	moholi		lesser bushbaby	DLC ID-3185; Farkleberry	M	captive	Duke Lemur Center	Julie Horvath, Duke Lemur Center	GMO-3185
GSE-1	Galago	senegalensis		Senegal galago	KB14283	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Leona Chemnick	
GTH-1	Galago	thomasi		Thomas's bushbaby	Gthomasi	U	wild	Democratic Republic of Congo	K. Ammann	Roos, unpublished
HAG-6	Hylobates	agilis		dark-handed gibbon	1138	M	captive born	Plock Zoo, Poland	W. Zduniak	Roos, unpublished
HCO-3	Nomascus	leucogenys		white-cheeked gibbon	1009	M	captive born	Duisburg Zoo, Germany	M. G. Hartmann	Roos, unpublished
HGR-1	Hapalemur	griseus		gray bamboo lemur	HGG44	M	wild	Madagascar	Y. Rumpler	Rumpler, unpublished
HLA-1	Hylobates	lar		lar gibbon	0005FC59B7	M		Taipei Zoo	Ci Wen	
HMU-6	Hylobates	muelleri		Mueller's bornean gray gibbon	1058	M	wild caught	Rostock Zoo, Germany	K. Linke	Roos, unpublished
HOC-1	Hapalemur	occidentalis		bamboo lemur	288	M	wild caught	University Strasbourg, France	Y. Rumpler	Rumpler, unpublished
HSA-34	Homo	sapiens		human		M			Sergey Kolmogorov	
LAA-1	Lophocebus	albigena		gray-cheeked mangabey	PR00609	M		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US	
LAC-2	Lagothrix	cana		gray woolly monkey	455	M	captive born	Basel Zoo, Switzerland	O. Pagan	no
LAN-1	Lepilemur	ankaranensis		Ankarana sportive lemur	L86	M	wild	Ankarana, Madagascar	Y. Rumpler	Andriaholinirina et al. 2006 BMC Evol Biol
LAT-2	Lophocebus	aterrimus		black mangabey	970	M	captive born	Gettorf Zoo, Germany	U. Traxel	no
LCH-1	Leontopithecus	chrysomelas		golden-headed lion tamarin	355	M	captive born	Köln Zoo, Germany	U. Ruempler	no
LCT-10	Lemur	catta		ring-tailed lemur	LECA	M	captive born	München Zoo, Germany	I. Maltzan	Roos et al. 2004 PNAS

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LDO-1	Lepilemur	dorsalis		black-striped sportive lemur	L244	M	wild	Ambanja, Madagascar	Y. Rumpler	Andriaholinirina et al. 2006 BMC Evol Biol	
LER-1	Lepilemur	ruficaudatus		red-tailed sportive lemur	LRU	U	unknown		Julie Horvath, Duke Lemur Center		
LJA-1	Lepilemur	jamesi		James' sportive lemur	L300	M	wild	Manombo, Madagascar	Y. Rumpler	Andriaholinirina et al. 2006 Primate Report	
LLG-1	Lagothrix	lagothrix		common woolly monkey	PR00525	F		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US		
LRO-244	Leontopithecus	rosalia	chrysomelas	golden headed lion tamarin	894	M	birth: unknown; currently captive	Los Angeles ZOO, CA, US	Kathie Wetmore, vet. asst., LA Zoo		
LSP-1	Lepilemur	septentrionalis		Northern sportive lemur	L211	M	wild	Sahafary, Madagascar	Y. Rumpler	Andriaholinirina et al. 2006 BMC Evol Biol	
LTA-2	Loris	tardigradus		slender loris	603	U	captive born	University Bochum, Germany	H. Schulze	Roos, unpublished	
MAC-1	Macaca	arctoides		stump-tailed macaque	692	F	captive born	Straubing Zoo, Germany	W. Peter	no	
MCA-1	Macaca	maura		Moor macaque	381	M	captive born	Hannover Zoo, Germany	A. Knieriem	no	
MCE-1	Mirza	zaza		Coquerel's Mouse Lemur	KB14285	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Leona Chemnick		
MCY-3	Macaca	cydonis		Taiwanese macaque	880805	M	wild born; currently captive	Nan To, Taiwan; Taipei Zoo, Taipei, TAIWAN	Warren Johnson		
MFA-18	Macaca	fascicularis		crab-eating/long-tailed macaque	182	F	captive born	German Primate Center, Germany	A. Schrod	no	
MFS-2	Macaca	fuscata		Japanese macaque	Julie	F	captive born	Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke		
MHU-1	Mico	humeralifer		black and white tassel-ear marmoset	55	M	captive	Instituto national de Cancer - Genetics Division	Centro Nacional de Primatas		
MLE-2	Mandrillus	leucophaeus		drill	323	M	captive born	Wuppertal Zoo, Germany	G. Olbricht	no	
MMA-14	Macaca	mulatta		rhesus macaque	046	M	captive born	Leipzig Zoo, Germany	K. Eulenberger	no	
MMR-2	Microcebus	murinus	subspecies 2	grey mouse lemur	DLC ID-7016; Musk Rose	M	wild-caught	Duke Lemur Center	Julie Horvath, Duke Lemur Center		
MNE-5	Macaca	nemestrina		pig-tailed macaque	216	M	captive born	Ludwig-Maximilian-University, Germany	M. Laska	no	
MNG-3	Macaca	nigra		Celebes macaque	857	M	captive born	Gettorf Zoo, Germany	U. Traxel	no	
MOC-1	Macaca	ochreata		booted macaque		M	captive born	Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke, Patrick Mahlon		
MOG-1	Miopithecus	ogouensis		Gabon talapoin	KB5742	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder		
MSE-1	Macaca	siberu		Siberut macaque	MSIB	U	wild caught	National Museums Scotland, Great Britain	A. Kitchener	Roos, unpublished	
MSI-7	Macaca	silenus		lion-tailed macaque	866	M	captive born	German Primate Center, Germany	A. Schrod	no	
MSP-12	Mandrillus	sphinx		baboon, mandrill	009	M	captive born	Rostock Zoo, Germany	K. Linke	no	
MSY-3	Macaca	sylvanus		barbaru macaque	722	M	captive born	La Vallée des Signes, France	J. Vermeer	no	
MTH-3	Macaca	thibetana		Tibetan macaque	KB5930	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Leona Chemnick		
MTO-6	Macaca	tonkeana		tonkean macaque	Brutus	M	captive born	Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke		
NBE-1	Nycticebus	bengalensis		Bengal slow loris	870	M	wild caught	Berlin Zoo, Germany	R. Göltenboth	Roos, unpublished	
NCN-2	Nomascus	concolor		black gibbon	560	M	wild	Che Tao, Vietnam	T. Nadler	Roos, unpublished	
NCO-2	Nycticebus	cougang		slow loris	560	M	wild	Che Tao, Vietnam	T. Nadler	Roos, unpublished	
NGA-2	Nomascus	gabrielae		red-cheeked gibbon	P109	M	wild caught	Endangered Primate Rescue Center, Vietnam	T. Nadler	Roos, unpublished	
NLA-2	Nasalis	larvatus		proboscis monkey	Nlarvatus	M	captive born	Wilhelma Stuttgart, Germany	W. Rietschel	Osterholz et al. 2008 BMC Evol Biol	
NPY-1	Nycticebus	pygmaeus		pygmy slow loris	12-016	M	wild caught, confiscated	Endangered Primate Rescue Center, Vietnam	T. Nadler	Roos, unpublished	
NSI-1	Nomascus	siki		Southern white-cheeked gibbon	9-03	M	wild caught, confiscated	Endangered Primate Rescue Center, Vietnam	T. Nadler	Roos, unpublished	
OCR-1	Otolemur	crassicaudatus		greater galago	GACR	U	captive born	University Tübingen, Germany	H. Tichy	Roos, unpublished	
PAN-10	Papio	anubis		East African baboon	13301	M	captive born	German Primate Center, Germany	A. Schrod	Roos, unpublished	
PBD-1	Ptilocolobus	badius		Western red colobus	PB1	M	wild	Tai National Park, Ivory Coast	F. H. Leendertz	Roos, unpublished	
PCM-1	Presbytis	comata		Javan surili	551	F	wild caught	Howletts Wild Animal Park, Great Britain	E. Thetford	Roos, unpublished	
PCN-2	Pygathrix	cinerea		grey-shanked douc langur	343	M	wild caught, confiscated	Endangered Primate Rescue Center, Vietnam	T. Nadler	Roos, unpublished	
PDI-2	Propithecus	diadema		diademmed sifaka	Pdd18	M	wild	Zahamena, Madagascar	Y. Rumpler	Rumpler, unpublished	
PEP-1	Propithecus	edwardsi		Milne-Edwards's sifaka	Pde6	U	wild	Ambodisovoka, Madagascar	Y. Rumpler	Rumpler, unpublished	
PEP-2	Perodicticus	potto		potto	610	M	captive born	University Bochum, Germany	H. Schulze	Roos, unpublished	
PHM-1	Papio	hamadryas		Hamadryas baboon	KB10869	M		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder		
PIR-1	Pithecia	irrorata		gray monk saki	57	M	captive	Instituto national de Cancer - Genetics Division	Centro Nacional de Primatas		
PME-2	Presbytis	melalophos		Sumatran surili	714	M	wild caught	Howletts Wild Animal Park, Great Britain	E. Thetford	Roos, unpublished	
PNE-2	Pygathrix	nemaeus		red-shanked douc langur	266	M	captive born	Köln Zoo, Germany	U. Ruempler	Roos, unpublished	
PNI-1	Pygathrix	nigripes		black-shanked douc	344	F	wild caught, confiscated	Endangered Primate Rescue Center, Vietnam	T. Nadler	Roos, unpublished	
PPN-8	Pan	paniscus		bonobo; pygmy chimpanzee	4229782	M	birth: unknown; currently captive	San Diego Zoo, CA	Dan Janssen, DVM		
PPP-2	Papio	papio		Guinea baboon	238	M	captive born	Nürnberg Zoo, Germany	A. Gaucler	no	
PPT-1	Pithecia	pithecia		white-faced or Guianan saki	PR00239	M		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US		
PPY-155	Pongo	abelli		orang utan	519	M	wild caught	Nürnberg Zoo, Germany	A. Gaucler	Roos, unpublished	
PPY-157	Pongo	pygmaeus		orang utan	536	F	captive born	Duisburg Zoo, Germany	M. G. Hartmann	Roos, unpublished	
PTA-1	Propithecus	tattersalli		golden-crowned sifaka	762	U	wild	Daraina, Madagascar	Y. Rumpler	Rumpler, unpublished	
PTR-104	Pan	troglydites	verus	common chimpanzee	1014	M	captive born	Danzig Zoo, Poland	I. Krause	Roos, unpublished	
PTR-60	Pan	troglydites	troglydites	Central African chimpanzee	Masuku	F	wild born; currently captive	Gabon	Wolff Enard, Max Planck Institute for Evolutionary Anthropology Leipzig, Germany		
PVC-2	Propithecus	verreauxi	coquereli	Coquerel's sifaka	DLC ID-6827 Marcus Aurelius	M	captive		Julie Horvath, Duke Lemur Center		
PVE-1	Propithecus	verreauxi		Verreaux's sifaka	495	M	captive born	Parc Zoologique de Paris, France	C.-A. Gauthier	Roos, unpublished	
RBR-1	Rhinopithecus	brelichi		gray snub-nosed monkey	G002	M	wild caught	Fanjingshan Breeding Station, China	M. Yang	Roos, unpublished	

Table S1. List of DNA specimens used in study

SAU-1	Saimiri	ustus		bare-eared squirrel monkey	2307		wild caught	Jamari River, Rondônia State, Brazil;	Universidade Federal do Pará - Laboratório de Biologia Molecular, Campus de Braganca		
SBI-1	Saguinus	bicolor		Pied tamarin	S225	M	captive born	Magdeburg Zoo, Germany	P. Grothmann	no	
SBO-3	Saimiri	boliviensis	boliviensis	Bolivian squirrel monkey	711	M	captive born	La Vallee des Signes, France	J. Vermeer	Roos, unpublished	
SEE-1	Semnopithecus	entellus	entellus	hanuman langur	PR00739	M		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US		
SEF-2	Semnopithecus	entellus		hanuman langur	499	M	captive born	Berlin Zoo, Germany	R. Göltenboth	Osterholz et al. 2008 BMC Evol Biol	
SFU-6	Saguinus	fuscicollis		saddle-back tamarin	S66	M	captive born	Magdeburg Zoo, Germany	P. Grothmann	no	
SGE-3	Saguinus	geoffroyi		Geoffroy's tamarin		F		Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke		
SHE-1	Semnopithecus	hector		Tarai gray langur	SHEC1	U	wild	Ramnagar, Nepal	T. Ziegler	Osterholz et al. 2008 BMC Evol Biol	
SIM-2	Saguinus	imperator		emperor tamarin	60	M	captive	Instituto nacional de Cancer - Genetics Division	Centro Nacional de Primatas		
SLA-1	Saguinus	labiatus		red-chested mustached tamarin	KB3307	F		The Center for Reproduction of Endangered Species, San-Diego, CA, US	Leona Chemnick		
SMD-1	Saguinus	midas		midas tamarin	S222	M	captive born	Magdeburg Zoo, Germany	P. Grothmann	no	
SMY-3	Saguinus	mystax		moustached tamarin		M		Catoctin Wildlife Park and Zoo, Thumont, MD, US	June Bellizzi, Melody Roelke		
SOE-3	Saguinus	oedipus		cotton-top tamarin	1203	M	captive born	German Primate Center, Germany	A. Schrod	no	
SOO-1	Saimiri	oerstedii	oerstedii	red-backed squirrel monkey	PR00741	M		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US		
SSC-7	Saimiri	sciureus		South American squirrel monkey	210	M	captive born	Schwerin Zoo, Germany	U. Ricker	no	
SSI-1	Saguinus	martinsi		Martins's tamarin	61	M	born to wild caught	Instituto nacional de Cancer - Genetics Division	Centro de Primatologia do Estado do Rio de Janeiro		
SSY-2	Symphalangus	syndactylus		siamang	100331	M		National Zoological Park, DC, US	Dr. Mitchell Bush		
TAU-1	Trachypithecus	auratus		Javan langur	1000	M	captive born	Wilhelma Stuttgart, Germany	W. Rietschel	Roos et al. 2008 MPE	
TBA-1	Tarsius	bancanus		Western tarsier	107434	U		National Zoological Park, DC, US	Eduardo Eizirik; Dr. Richard Montali Pathology Dept.		
TDE-1	Trachypithecus	delacouri		Delacour's Langur	169	M	wild caught, confiscated	Endangered Primate Rescue Center, Vietnam	T. Nadler	Roos et al. 2007 VIP	
TFR-1	Trachypithecus	francoisi		Francois's leaf monkey or Indochinese langur	PR01099	M		Coriell Cell Repositories, NJ, US	Coriell Cell Repositories, NJ, US		
TGE-2	Theropithecus	gelada		gelada baboon	936	M	captive born	La Vallee des Signes, France	J. Vermeer	no	
TGL-4	Tupaia	glis		tree shrew		M	wild born; currently captive	Malaysia, Singapore Zoological Gardens	Warren Johnson; Paolo Martelli		
THA-1	Trachypithecus	hatinhensis		Hatinh langur	171	M	wild caught, confiscated	Endangered Primate Rescue Center, Vietnam	T. Nadler	Roos et al. 2007 VIP	
TMI-1	Tupaia	minor		lesser tree shrew	KB8637-3082	M	birth: unknown; currently captive	The Center for Reproduction of Endangered Species, San-Diego, CA, US	Oliver Ryder		
TOB-4	Trachypithecus	obscurus		dusky leaf monkey	215	M	captive born	Wuppertal Zoo, Germany	G. Olbricht	Osterholz et al. 2008 BMC Evol Biol	
TPH-1	Trachypithecus	phayrei		Phayre's leaf monkey	178	F	wild caught, confiscated	Endangered Primate Rescue Center, Vietnam	T. Nadler	Roos et al. 2007 VIP	
TSY-2	Tarsius	syrichta		Philippine tarsier	1017	U	wild caught	University Münster, Germany	J. Schmitz		
TVV-2	Trachypithecus	vetulus	monticola	Southwest purple-faced langur	435	M	wild caught	Belfast Zoo, Great Britain	M. Chalais	Roos, unpublished	
VVA-2	Varecia	variegata	variegata	ruffed lemur	DLC ID-4598	M	wild caught		Julie Horvath, Duke Lemur Center	Horvath et al 2008	
VVA-7	Varecia	variegata	rubra	ruffed lemur	DLC ID-6633	F	captive		Julie Horvath, Duke Lemur Center	Horvath et al 2008	