**Table S1: List of viruses used in the full-length genome analyses.**

| **Country** | **Virus Name** | **Species** | **Year** | **Phylogenetic clade - subclade** | **Source** | **Accession number** | **Reference** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Afghanistan | 02052AFG | Dog (*Canis familiaris*) | 2002 | Arctic-related – AL1b | Original brain | KX148225a | This study |
| Afghanistan | 04029AFG | Dog (*Canis familiaris*) | 2004 | Arctic-related – AL1b | Original brain | KX148227a | This study |
| Afghanistan | 04035AFG | Dog (*Canis familiaris*) | 2002 | Arctic-related – AL1b | Original brain | KX148226a | This study |
| Algeria | 15006FRA | Dog (*Canis familiaris*) | 2015 | Cosmopolitan – AF1a | Original brain | KX148197b | This study |
| Argentina | 97004ARG | Bat (*Tadarida brasiliensis*) | 1997 | Bat - TB | Mouse | KX148269c | This study |
| Belgium | 94033BEL | Red fox(*Vulpes vulpes*) | 1994 | Cosmopolitan - WE | Original brain | KX148125b | This study |
| Benin | 86097BEN | Cat*(Felis catus)* | 1986 | Africa-2 | Original brain | KX148107d | This study |
| Bosnia and Herzegovina | 86054YOU | Wolf*(Canis lupus)* | 1986 | Cosmopolitan - EE | Mouse | KX148145e | This study |
| Bosnia and Herzegovina | 86111YOU | Red fox(*Vulpes vulpes*) | 1986 | Cosmopolitan - WE | Mouse | KX148133f | This study |
| Botswana | 14016BOT | Wildcat(*Felis silvestris*) | 2009 | Africa-3 | Original brain | KX148218e | This study |
| Botswana | 14017BOT | Honey badger*(Mellivora capensis)* | 2009 | Africa-3 | Original brain | KX148219e | This study |
| Brazil | 86001BRE | Dog (*Canis familiaris*) | 1986 | Cosmopolitan – AM3a | Original brain | KX148216e | This study |
| Brazil | 86117BRE | Dog (*Canis familiaris*) | 1986 | Bat - DR | Original brain | KX148109d | This study |
| Brazil | 86123BRE | Dog (*Canis familiaris*) | 1986 | Cosmopolitan – AM3b | Mouse | KX148217f | This study |
| Brazil | 95022BRE | Dog (*Canis familiaris*) | 1995 | Cosmopolitan – AM3a | Original brain | KX148215a | This study |
| Brazil | 95023BRE | Dog (*Canis familiaris*) | 1995 | Cosmopolitan – AM3a | Original brain | KX148214f | This study |
| Brazil | BR\_AL1 | Bat (*Artibeus lituratus*) | 1998 | Bat - DR | Original brain | AB519641 | (1) |
| Brazil | BR\_DR1 | Bat (*Desmodus rotundus*) | 2000 | Bat - DR | Original brain | AB519642 | (1) |
| Brazil | BR\_Pfx1 | Brazilian wild fox(*Dusicyon*\_sp.) | 2002 | Cosmopolitan – AM3b | Original brain | AB362483 | (2) |
| Brazil | BR\_Pfx3 | Brazilian wild fox(*Dusicyon*\_sp.) | 2001 | Cosmopolitan – AM3b | ? | AB517660 | Mochizuki *et al.,* unpublished |
| Brazil | BRdg335 | Dog (*Canis familiaris*) | 2003 | Cosmopolitan – AM3a | ? | AB517659 | Mochizuki *et al.,* unpublished |
| Burkina Faso | 86036HAV | Dog (*Canis familiaris*) | 1986 | Africa-2 | Mouse | KX148234e | This study |
| Burkina Faso | 95047HAV | Dog (*Canis familiaris*) | 1995 | Africa-2 | Original brain | KX148230a | This study |
| Cambodia | 02006CBG | Dog (*Canis familiaris*) | 1998 | Asian – SEA3 | Original brain | KX148249a | This study |
| Cambodia | 99008CBG | Dog (*Canis familiaris*) | 1999 | Asian – SEA3 | Original brain | KX148252a | This study |
| Cambodia | 99011CBG | Dog (*Canis familiaris*) | 1998 | Asian – SEA3 | Original brain | KX148251a | This study |
| Cambodia | 99012CBG | Dog (*Canis familiaris*) | 1998 | Asian – SEA3 | Original brain | KX148253a | This study |
| Cambodia | 99016CBG | Dog (*Canis familiaris*) | 1999 | Asian – SEA3 | Original brain | KX148250a | This study |
| Cameroon | 88003CAM | Dog (*Canis familiaris*) | 1987 | Africa-2 | Original brain | KX148243a | This study |
| Cameroon | 95002CAM | Dog (*Canis familiaris*) | 1994 | Africa-2 | Original brain | KX148242a | This study |
| Canada | RRV\_ON\_99 | Raccoon*(Procyon lotor)* | 1999 | RAC-SK – RAC | Original brain | EU311738 | (3) |
| Central African Republic | 92029CAR | Dog (*Canis familiaris*) | 1992 | Cosmopolitan – AF1b | Original brain | KX148208a | This study |
| Central African Republic | CAR\_11\_001 | Human (*Homo sapiens*) | 2011 | Africa-2 | Saliva | KF977826 | (4) |
| Chad | 90021TCH | Dog (*Canis familiaris*) | 1990 | Africa-2 | Original brain | KX148240a | This study |
| Chad | 96009TCH | Dog (*Canis familiaris*) | 1996 | Africa-2 | Original brain | KX148241a | This study |
| China | 02046CHI | Dog (*Canis familiaris*) | 1994 | Asian – SEA2a | Mouse | KX148264e | This study |
| China | 02050CHI | Human (*Homo sapiens*) | 1992 | Asian – SEA1a | Mouse | KX148267e | This study |
| China | 98011CHI | Dog (*Canis familiaris*) | 1998 | Asian – SEA1b | Original brain | KX148265a | This study |
| China | JX09\_18 | Ferret badger*(Melogale moschata)* | 2009 | Asian – SEA2b | Original brain | KF726852 | (5) |
| China | JX10\_37 | Ferret badger*(Melogale moschata)* | 2010 | Asian – SEA1b | Original brain | KF726853 | (5) |
| China | JX08\_45 | Ferret badger*(Melogale moschata)* | 2008 | Asian – SEA2b | ? | GU647092 | Zhao *et al.,* unpublished |
| China | JX09\_17 | Ferret badger*(Melogale moschata)* | 2009 | Asian – SEA1b | Original brain | KC762941 | (6) |
| China | BJ2011E | Horse(*Equus ferus*) | 2011 | Asian – SEA1b | ? | JQ423952 | Chen *et al.,* unpublished |
| China | CHN0802D | Dog (*Canis familiaris*) | 2008 | Asian – SEA2a | Original brain | JQ970480 | Tang *et al.,* unpublished |
| China | CJS0621D | Dog (*Canis familiaris*) | 2006 | Asian – SEA1b | Original brain | JQ970481 | Tang *et al.,* unpublished |
| China | CJS0636D | Dog (*Canis familiaris*) | 2006 | Asian – SEA1b | Original brain | JQ970482 | Tang *et al.,* unpublished |
| China | CJS0848D | Dog (*Canis familiaris*) | 2008 | Asian – SEA1b | Original brain | JQ970483 | Tang *et al.,* unpublished |
| China | CJX0903D | Dog (*Canis familiaris*) | 2009 | Asian – SEA1b | Original brain | JQ970484 | Tang *et al.,* unpublished |
| China | CJX0906D | Dog (*Canis familiaris*) | 2009 | Asian – SEA1b | Original brain | JQ970485 | Tang *et al.,* unpublished |
| China | CNM1101C | Cow(*Bos taurus*) | 2011 | Asian – SEA1b | Original brain | KC193267 | Yin *et al.,* unpublished |
| China | CNM1104D | Dog (*Canis familiaris*) | 2011 | Asian – SEA1b | Original brain | KC252634 | Yin *et al.,* unpublished |
| China | CQ92 | Dog (*Canis familiaris*) | 1992 | Asian – SEA1a | ? | GU345746 | (7) |
| China | CQH1202D | Dog (*Canis familiaris*) | 2012 | Arctic-related – AL2 | ? | KM272192 | Guo *et al.,* unpublished |
| China | CSD0708D | Dog (*Canis familiaris*) | 2007 | Asian – SEA1b | Original brain | JQ970486 | Tang *et al.,* unpublished |
| China | CSX0904D | Dog (*Canis familiaris*) | 2009 | Asian – SEA1b | Original brain | JQ970487 | Tang *et al.,* unpublished |
| China | CYN1009D | Dog (*Canis familiaris*) | 2010 | Asian – SEA3 | Original brain | JQ730682 | (8) |
| China | DRV\_AH08 | Dog (*Canis familiaris*) | 2008 | Asian – SEA2b | Mouse | HQ450385 | (9) |
| China | F02 | Ferret badger*(Melogale moschata)* | 2008 | Asian – SEA2b | Original brain | FJ712195 | Wang *et al.,* unpublished |
| China | F04 | Ferret badger*(Melogale moschata)* | 2008 | Asian – SEA1b | Original brain | J712196 | Wang *et al.,* unpublished |
| China | FJ008 | Dog (*Canis familiaris*) | 2008 | Asian – SEA1b | ? | FJ866835 | Zhang *et al.,* unpublished |
| China | FJ009 | Dog (*Canis familiaris*) | 2008 | Asian – SEA1b | ? | FJ866836 | Zhang *et al.,* unpublished |
| China | FJDRV | Dog (*Canis familiaris*) | 2008 | Asian – SEA1b | ? | JN609295 | Qi, unpublished |
| China | GD\_SH\_01 | Pig*(Sus domesticus)* | 2011 | Asian – SEA2a | Original brain | JX088694 | (10) |
| China | GX4 | Dog (*Canis familiaris*) | 1994 | Asian – SEA2a | ? | GU358653 | (7) |
| China | GXHXN | Cattle (*Bos taurus*) | 2009 | Asian – SEA1b | Original brain | KC169986 | (11) |
| China | HN10 | Human (*Homo sapiens*) | 2006 | Asian – SEA2a | ? | EU643590 | (12) |
| China | IMDRV\_13 | Fallow deer(*Dama dama*) | 2013 | Asian – SEA1b | Original brain | KJ564280 | (13) |
| China | JZ13\_Lv | Human (*Homo sapiens*) | 2013 | Asian – SEA1b | ? | KJ004416 | Wang *et al.,* unpublished |
| China | RV\_J | Human (*Homo sapiens*) | 1986 | Asian – SEA1a | ? | GU345747 | (7) |
| China | SH06 | Dog (*Canis familiaris*) | 2006 | Asian – SEA1b | ? | GU345748 | (7) |
| China | WH11 | Donkey*(Equus asinus)* | 2011 | Asian – SEA1b | Original brain | JQ647510 | (14) |
| China | WQ14\_RF | Red fox(*Vulpes vulpes*) | 2014 | Cosmopolitan – CA1 | Original brain | KM016899 | Liu *et al.,* unpublished |
| China | Shaanxi\_HZ | Dog (*Canis familiaris*) | 2009 | Asian – SEA1b | ? | KC977995 | (15) |
| Egypt | 86092EGY | Human (*Homo sapiens*) | 1979 | Cosmopolitan – AF4 | Mouse | KX148101d | This study |
| Estonia | 93038EST | Red fox(*Vulpes vulpes*) | 1992 | Cosmopolitan – NEE | Original brain | KX148148a | This study |
| Estonia | 93039EST | Raccoon dog*(Nyctereutes procyonoides)* | 1991 | Cosmopolitan – NEE | Original brain | KX148149a | This study |
| Estonia | 93041EST | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – NEE | Original brain | KX148155a | This study |
| Estonia | 93042EST | Raccoon dog*(Nyctereutes procyonoides)* | 1991 | Cosmopolitan – NEE | Original brain | KX148156a | This study |
| Estonia | 93043EST | Raccoon dog*(Nyctereutes procyonoides)* | 1993 | Cosmopolitan – NEE | Original brain | KX148157a | This study |
| Estonia | 93105EST | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – NEE | Original brain | KX148158c | This study |
| Estonia | RV437 | Raccoon dog*(Nyctereutes procyonoides)* | ND | Cosmopolitan – NEE | Mouse | KF154997 | (16) |
| Ethiopia | 88008ETH | Dog (*Canis familiaris*) | 1988 | Cosmopolitan – AF1a | Original brain | KX148200a | This study |
| Ethiopia | RV2985 | Ethiopian wolf (*Canis simensis*) | 2014 | Cosmopolitan – AF1a | Original brain | KP723638 | (17) |
| Finland | 93046FIN | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – NEE | Original brain | KX148146a | This study |
| Finland | 93048FIN | Raccoon dog*(Nyctereutes procyonoides)* | 1988 | Cosmopolitan – NEE | Original brain | KX148147a | This study |
| France | 91047FRA | Red fox(*Vulpes vulpes*) | 1991 | Cosmopolitan – WE | Original brain | KX148127a | This study |
| France | 92044FRA | Red fox(*Vulpes vulpes*) | 1992 | Cosmopolitan – WE | Original brain | KX148128a | This study |
| France | 94029FRA | Red fox(*Vulpes vulpes*) | 1994 | Cosmopolitan – WE | Original brain | KX148134a | This study |
| France | 96002FRA | Red fox(*Vulpes vulpes*) | 1996 | Cosmopolitan – WE | Original brain | KX148126a | This study |
| French Guiana | 09035FRA | Bat (*Phyllostomidae stenodermatinae*) | 2009 | Bat - DR | Original brain | KX148100g | This study |
| French Guiana | 90001FRA | Dog (*Canis familiaris*) | 1990 | Bat - DR | Original brain | KX148268b | This study |
| Gabon | 95049GAB | Dog (*Canis familiaris*) | 1995 | Cosmopolitan – AF1a | Original brain | KX148202a | This study |
| Germany | 92001GER | Red fox(*Vulpes vulpes*) | 1991 | Cosmopolitan – WE | Original brain | KX148135a | This study |
| Germany | 92002GER | Red fox(*Vulpes vulpes*) | 1991 | Cosmopolitan – CE | Original brain | KX148113a | This study |
| Germany | 92010GER | Red fox(*Vulpes vulpes*) | 1991 | Cosmopolitan – CE | Original brain | KX148124a | This study |
| Germany | 92012GER | Red fox(*Vulpes vulpes*) | 1991 | Cosmopolitan – CE | Original brain | KX148122a | This study |
| Germany | 92017GER | Red fox(*Vulpes vulpes*) | 1991 | Cosmopolitan – CE | Original brain | KX148123a | This study |
| Greenland | 86083GRO | Dog (*Canis familiaris*) | 1980 | Arctic-related – A | Mouse | KX148105d | This study |
| Guinea | 90024GUI | Dog (*Canis familiaris*) | 1990 | Africa-2 | Original brain | KX148244a | This study |
| Hungary | 92015HON | Human (*Homo sapiens*) | 1991 | Cosmopolitan – CA3 | Original brain | KX148160e | This study |
| Hungary | 93080HON | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – EE | Original brain | KX148143a | This study |
| Hungary | 93083HON | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – EE | Original brain | KX148136a | This study |
| Hungary | 93089HON | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – EE | Original brain | KX148137a | This study |
| Hungary | 93091HON | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – EE | Original brain | KX148138a | This study |
| Hungary | 93093HON | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – EE | Original brain | KX148139a | This study |
| India | 97002IND | Human (*Homo sapiens*) | 1997 | Indian Subcontinent | Original brain | KX148246b | This study |
| India | NNV\_RAB\_H | Human (*Homo sapiens*) | 2006 | Arctic-related – AL1a | Original brain | EF437215 | Desai *et al.,* unpublished |
| India | RV61 | Human (*Homo sapiens*) | 1987 | Arctic-related – AL1a | Mouse | KF154996 | (16) |
| India | Serotype\_1 | Human (*Homo sapiens*) | 2004 | Arctic-related – AL1a | Saliva? | AY956319 | Pfefferle *et al.,* unpublished |
| Indonesia | 03003INDO | Dog (*Canis familiaris*) | 2003 | Asian – SEA1a | Mouse | KX148266c | This study |
| Irak | RV2516 | Cow(*Bos taurus*) | 2010 | Cosmopolitan – CA2 | Original brain | KF155000 | (16) |
| Iran | 86081IRA | Dog (*Canis familiaris*) | 1985 | Cosmopolitan – ME1a | Mouse | KX148189f | This study |
| Iran | 86082IRA | Sheep*(Ovis aries)* | 1974 | Cosmopolitan – CA1 | Mouse | KX148159e | This study |
| Iran | 87002IRA | Wolf*(Canis pallipes)* | 1984 | Cosmopolitan – ME1a | Mouse | KX148186f | This study |
| Iran | 93008IRA | Jackal*(Canis aureus)* | 1976 | Cosmopolitan – ME1a | Original brain | KX148190a | This study |
| Iran | 93009IRA | Wolf*(Canis pallipes)* | 1991 | Cosmopolitan – ME1a | Original brain | KX148188a | This study |
| Iran | 93019IRA | Jackal*(Canis aureus)* | 1993 | Cosmopolitan – CA2 | Original brain | KX148212a | This study |
| Iran | 96299IRA | Wolf*(Canis pallipes)* | 1996 | Cosmopolitan – ME1a | Original brain | KX148185a | This study |
| Iran | 96320IRA | Jackal*(Canis aureus)* | 1996 | Cosmopolitan – ME1a | Original brain | KX148187a | This study |
| Israel | 93030ISR | Fox*(Und.)* | 1993 | Cosmopolitan – ME1a | Original brain | KX148180a | This study |
| Israel | 93031ISR | Fox*(Und.)* | 1993 | Cosmopolitan – ME1a | Original brain | KX148183a | This study |
| Israel | 93032ISR | Jackal*(Canis aureus)* | 1993 | Cosmopolitan – ME1b | Original brain | KX148191a | This study |
| Israel | 93033ISR | Dog (*Canis familiaris*) | 1993 | Cosmopolitan – ME1b | Original brain | KX148192a | This study |
| Israel | 96306ISR | Dog (*Canis familiaris*) | 1996 | Cosmopolitan – ME1a | Original brain | KX148178e | This study |
| Israel | 96307ISR | Dog (*Canis familiaris*) | 1996 | Cosmopolitan – ME1a | Original brain | KX148182e | This study |
| Israel | 96312ISR | Dog (*Canis familiaris*) | 1996 | Cosmopolitan – ME1a | Original brain | KX148181c | This study |
| Israel | 96314ISR | Jackal*(Canis aureus)* | 1996 | Cosmopolitan – ME1a | Original brain | KX148179a | This study |
| Israel | 96317ISR | Fox*(Und.)* | 1996 | Cosmopolitan – ME1a | Original brain | KX148177a | This study |
| Israel | 96324ISR | Cattle (*Bos taurus*) | 1996 | Cosmopolitan – ME1a | Original brain | KX148184a | This study |
| Israel | RV2324 | Dog (*Canis familiaris*) | 1950 | Cosmopolitan – AF4 | ? | KF154998 | (16) |
| Ivory Coast | 01007CI | Dog (*Canis familiaris*) | 2001 | Africa-2 | Original brain | KX148235a | This study |
| Ivory Coast | 92037CI | Dog (*Canis familiaris*) | 1992 | Africa-2 | Original brain | KX148232a | This study |
| Ivory Coast | 92038CI | Dog (*Canis familiaris*) | 1992 | Africa-2 | Original brain | KX148233a | This study |
| Kenya | 14015ITA | Human (*Homo sapiens*) | 2014 | Cosmopolitan – AF1a | Original brain | KX148207c | This study |
| Laos | 02003LAO | Dog (*Canis familiaris*) | 2002 | Asian – SEA3 | Original brain | KX148258a | This study |
| Laos | 02004LAO | Dog (*Canis familiaris*) | 2002 | Asian – SEA3 | Original brain | KX148256a | This study |
| Laos | 02005LAO | Dog (*Canis familiaris*) | 2002 | Asian – SEA3 | Original brain | KX148257a | This study |
| Laos | 99010LAO | Dog (*Canis familiaris*) | 1999 | Asian – SEA3 | Original brain | KX148255a | This study |
| Laos | Lao2 | Dog (*Canis familiaris*) | 2011 | Asian – SEA3 | Original brain | AB981663 | (18) |
| Laos | Lao4 | Dog (*Canis familiaris*) | 2011 | Asian – SEA3 | Original brain | AB981664 | (18) |
| Madagascar | 04033MAD | Dog (*Canis familiaris*) | 2004 | Cosmopolitan – AF1c | Original brain | KX148209e | This study |
| Madagascar | 86046MAD | Dog (*Canis familiaris*) | 1986 | Cosmopolitan – AF1c | Original brain | KX148211c | This study |
| Madagascar | 98002MAD | Human (*Homo sapiens*) | 1998 | Cosmopolitan – AF1c | Original brain | KX148210e | This study |
| Mauritania | 93011MAU | Dog (*Canis familiaris*) | 1993 | Africa-2 | Original brain | KX148236a | This study |
| Mauritania | 93012MAU | Dog (*Canis familiaris*) | 1993 | Africa-2 | Original brain | KX148237a | This study |
| Mexico | 91010MEX | Human (*Homo sapiens*) | 1991 | Cosmopolitan – AM2a | Mouse | KX148112f | This study |
| Mexico | 91014MEX | Dog (*Canis familiaris*) | 1991 | Cosmopolitan – AM2a | Original brain | KX148110f | This study |
| Mexico | 91015MEX | Dog (*Canis familiaris*) | 1991 | Cosmopolitan – AM2a | Original brain | KX148111a | This study |
| Mexico | 91026MEX | Dog (*Canis familiaris*) | 1991 | Cosmopolitan – AM2a | Mouse | KX148102d | This study |
| Mexico | 3645DR | Human (*Homo sapiens*) | 2009 | Bat – DR | Mouse | JQ685953 | (19) |
| Mexico | Coati\_3639 | Coati*(Nasua narica)* | 2009 | Bat – TB | Mouse | JQ685963 | (19) |
| Mexico | DRV\_Mexico | Dog (*Canis familiaris*) | ND | Cosmopolitan – AM2a | Mouse | HQ450386 | (20) |
| Mexico | MEXSK13938 | Spotted skunk*(Spilogale putorius)* | 2007 | RAC-SK – MexSK-1 | Mouse | JQ685954 | (19) |
| Mexico | MEXSK3636 | Spotted skunk*(Spilogale putorius)* | 2009 | Cosmopolitan – AM2b | Mouse | JQ685975 | (19) |
| Mexico | MEXSK3644 | Spotted skunk*(Spilogale putorius)* | 2009 | RAC-SK – MexSK-1 | Mouse | JQ685929 | (19) |
| Montenegro | 86058YOU | Cow(*Bos taurus*) | 1978 | Cosmopolitan | Mouse | KX148104d | This study |
| Mozambique | 86031MOZ | Dog (*Canis familiaris*) | 1986 | Cosmopolitan – AF1a | Mouse | KX148203e | This study |
| Morocco | 04031MAR | Dog (*Canis familiaris*) | 2004 | Cosmopolitan – AF1a | Original brain | KX148195a | This study |
| Morocco | 08342MAR | Dog (*Canis familiaris*) | 2008 | Cosmopolitan – AF1a | Original brain | KX148193f | This study |
| Morocco | 89017MAR | Dog (*Canis familiaris*) | 1989 | Cosmopolitan – AF1a | Original brain | KX148194a | This study |
| Morocco | 90016MAR | Dog (*Canis familiaris*) | 1990 | Cosmopolitan – AF1a | Original brain | KX148196a | This study |
| Morocco | RV2627 | Cow(*Bos taurus*) | 2009 | Cosmopolitan – AF1a | Original brain | KF155001 | (16) |
| Myanmar | 99009BIR | Dog (*Canis familiaris*) | 1999 | Asian – SEA3 | Original brain | KX148247a | This study |
| Myanmar | 99015BIR | Dog (*Canis familiaris*) | 1999 | Asian – SEA3 | Original brain | KX148248a | This study |
| NA | PV\_RefSeq | Vaccine strain | ND | Cosmopolitan – Vac | NA | NC\_001542 | (21) |
| NA | SAD\_B19 | Vaccine strain | ND | Cosmopolitan – Vac | NA | M31046 | (22) |
| Namibia | 92030NAM | Dog (*Canis familiaris*) | 1992 | Cosmopolitan – AF1b | Original brain | KX148204a | This study |
| Namibia | 178J09 | Jackal*(Und.)* | 2009 | Cosmopolitan – AF1b | ? | JX473838 | Scott *et al.,* unpublished |
| Namibia | 192J09 | Jackal*(Und.)* | 2009 | Cosmopolitan – AF1b | ? | JX473839 | Scott *et al.,* unpublished |
| Namibia | 239K09 | Namibian kudu(*Tragelaphus strepsiceros*) | 2009 | Cosmopolitan – AF1b | ? | JX473840 | Scott *et al.,* unpublished |
| Namibia | 240K09 | Namibian kudu(*Tragelaphus strepsiceros*) | 2009 | Cosmopolitan – AF1b | ? | JX473841 | Scott *et al.,* unpublished |
| Nepal | 09029NEP | Buffalo*(Und.)* | 2009 | Indian Subcontinent | Original brain | KX148245c | This study |
| Nepal | 11001NEP | Cattle (*Bos taurus*) | 2011 | Indian Subcontinent | Original brain | KX148108d | This study |
| Nepal | 99001NEP | Dog (*Canis familiaris*) | 1998 | Arctic-related – AL3 | Original brain | KX148228a | This study |
| Niger | 90010NIG | Dog (*Canis familiaris*) | 1990 | Africa-2 | Original brain | KX148231a | This study |
| Niger | 90012NIG | Dog (*Canis familiaris*) | 1990 | Africa-2 | Original brain | KX148229a | This study |
| Nigeria | 86003BRE | Dog (*Canis familiaris*) | 1986 | Cosmopolitan – AF1a | Original brain | KX148201e | This study |
| Nigeria | DRV\_NG11 | Dog (*Canis familiaris*) | 2011 | Africa-2 | Original brain | KC196743 | (23) |
| Oman | 91034OMA | Camel*(Camelus dromedarius)* | 1990 | Cosmopolitan – ME1a | Original brain | KX148169a | This study |
| Oman | 91035OMA | Fox*(Und.)* | 1990 | Cosmopolitan – ME1a | Original brain | KX148170a | This study |
| Pakistan | Pk\_23 | Cow(*Bos taurus*) | 2010 | Arctic-related – AL1a | Mouse | HE802675 | Hussain *et al.,* unpublished |
| Pakistan | Pk\_24 | Cow(*Bos taurus*) | 2007 | Arctic-related – AL1a | Mouse | HE802676 | Hussain *et al.,* unpublished |
| Philippines | 04030PHI | Dog (*Canis familiaris*) | 2004 | Asian – SEA4 | Mouse | KX148260e | This study |
| Philippines | 94272PHI | Dog (*Canis familiaris*) | 1994 | Asian – SEA4 | Original brain | KX148259a | This study |
| Philippines | 94275PHI | Dog (*Canis familiaris*) | 1994 | Asian – SEA4 | Original brain | KX148263a | This study |
| Philippines | 94278PHI | Dog (*Canis familiaris*) | 1994 | Asian – SEA4 | Original brain | KX148262f | This study |
| Philippines | 94281PHI | Dog (*Canis familiaris*) | 1994 | Asian – SEA4 | Original brain | KX148261a | This study |
| Poland | 96026POL | Raccoon dog*(Nyctereutes procyonoides)* | 1986 | Cosmopolitan – NEE | Original brain | KX148150a | This study |
| Poland | 96042POL | Red fox(*Vulpes vulpes*) | 1996 | Cosmopolitan – NEE | Original brain | KX148151a | This study |
| Poland | 96045POL | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – CE | Original brain | KX148119a | This study |
| Poland | 96056POL | Red fox(*Vulpes vulpes*) | 1993 | Cosmopolitan – CE | Original brain | KX148121a | This study |
| Poland | 96077POL | Raccoon dog*(Nyctereutes procyonoides)* | 1994 | Cosmopolitan – CE | Original brain | KX148118a | This study |
| Poland | 96097POL | Raccoon dog*(Nyctereutes procyonoides)* | 1996 | Cosmopolitan – NEE | Original brain | KX148153a | This study |
| Poland | 96104POL | Red fox(*Vulpes vulpes*) | 1995 | Cosmopolitan – CE | Original brain | KX148114a | This study |
| Poland | 96135POL | Red fox(*Vulpes vulpes*) | 1992 | Cosmopolitan – EE | Original brain | KX148141a | This study |
| Poland | 96140POL | Raccoon dog*(Nyctereutes procyonoides)* | 1993 | Cosmopolitan – CE | Original brain | KX148120a | This study |
| Poland | 96142POL | Raccoon dog*(Nyctereutes procyonoides)* | 1996 | Cosmopolitan – NEE | Original brain | KX148152a | This study |
| Poland | 96177POL | Red fox(*Vulpes vulpes*) | 1994 | Cosmopolitan – EE | Original brain | KX148142a | This study |
| Poland | 96250POL | Red fox(*Vulpes vulpes*) | 1996 | Cosmopolitan – CE | Original brain | KX148115a | This study |
| Poland | 96256POL | Red fox(*Vulpes vulpes*) | 1996 | Cosmopolitan – CE | Original brain | KX148116a | This study |
| Poland | 97046POL | Red fox(*Vulpes vulpes*) | 1997 | Cosmopolitan – CE | Original brain | KX148117a | This study |
| Poland | 97078POL | Raccoon dog*(Nyctereutes procyonoides)* | 1997 | Cosmopolitan – NEE | Original brain | KX148154a | IP |
| Russia | 1350KRA | Dog (*Canis familiaris*) | 2008 | Cosmopolitan – CA1 | Original brain | JQ944705 | Chupin *et al.,* unpublished |
| Russia | 1352KRA | Dog (*Canis familiaris*) | 2008 | Cosmopolitan – CA2 | Original brain | JQ944706 | Chupin *et al.,* unpublished |
| Russia | 1410KOM | Deer*(Und.)* | 2008 | Arctic-related – A | Original brain | JQ944707 | Chupin *et al.,* unpublished |
| Russia | 1564NNO | Red fox(*Vulpes vulpes*) | 2008 | Cosmopolitan – CA3 | Original brain | JQ944708 | Chupin *et al.,* unpublished |
| Russia | 184VNO | Raccoon dog*(Nyctereutes procyonoides)* | 2009 | Cosmopolitan – NEE | Original brain | JQ944704 | Chupin *et al.,* unpublished |
| Russia | 8052f | Red fox(*Vulpes vulpes*) | 2011 | Cosmopolitan – CA1 | Mouse | KC595280 | (24) |
| Russia | 8053c | Cat*(Felis catus)* | 2011 | Cosmopolitan – CA1 | Mouse | KC595281 | (24) |
| Russia | 8054f | Red fox(*Vulpes vulpes*) | 2011 | Cosmopolitan – CA1 | Mouse | KC595282 | (24) |
| Russia | 8057f | Red fox(*Vulpes vulpes*) | 2011 | Cosmopolitan – CA1 | Mouse | KC595283 | (24) |
| Rwanda | 94289RWA | Dog (*Canis familiaris*) | 1994 | Cosmopolitan – AF1b | Original brain | KX148205a | This study |
| Saudi Arabia | 04034ARS | Fox*(Und.)* | 2004 | Cosmopolitan – ME1a | Original brain | KX148175a | This study |
| Saudi Arabia | 87006ARS | Fox*(Und.)* | 1987 | Cosmopolitan – ME1a | Original brain | KX148168a | This study |
| Saudi Arabia | 87007ARS | Horse(*Equus ferus*) | 1987 | Cosmopolitan – ME1a | Original brain | KX148172a | This study |
| Saudi Arabia | 97139ARS | Red fox*(Vulpes vulpes)* | 1997 | Cosmopolitan – ME1a | Original brain | KX148173a | This study |
| Saudi Arabia | 98001ARS | Fox*(Und.)* | 1998 | Cosmopolitan – ME1a | Original brain | KX148174a | This study |
| Saudi Arabia | 99004ARS | Red fox*(Vulpes vulpes)* | 1998 | Cosmopolitan – ME1a | Original brain | KX148175a | This study |
| Senegal | 93003SEN | Dog (*Canis familiaris*) | 1991 | Africa-2 | Original brain | KX148238c | This study |
| Senegal | 93005SEN | Dog (*Canis familiaris*) | 1992 | Africa-2 | Original brain | KX148239c | This study |
| Serbia | 86109YOU | Red fox(*Vulpes vulpes*) | 1986 | Cosmopolitan – EE | Original brain | KX148140a | This study |
| Serbia | 86133SER | Red fox(*Vulpes vulpes*) | 1972 | Cosmopolitan | Mouse | KX148161e | This study |
| Slovenia | 94086SLN | Red fox(*Vulpes vulpes*) | 1994 | Cosmopolitan – WE | Original brain | KX148131a | This study |
| Slovenia | 94091SLN | Red fox(*Vulpes vulpes*) | 1994 | Cosmopolitan – WE | Original brain | KX148129a | This study |
| Slovenia | 94094SLN | Red fox(*Vulpes vulpes*) | 1994 | Cosmopolitan – WE | Original brain | KX148132a | This study |
| Slovenia | 94096SLN | Red fox(*Vulpes vulpes*) | 1994 | Cosmopolitan – WE | Original brain | KX148133a | This study |
| Slovenia | 94099SLN | Red fox(*Vulpes vulpes*) | 1994 | Cosmopolitan – EE | Original brain | KX148144a | This study |
| Somalia | 93006SOM | Jackal*(Canis mesomelas)* | 1993 | Cosmopolitan – AF1a | Original brain | KX148199e | This study |
| Somalia | 93128SOM | Dog (*Canis familiaris*) | 1993 | Cosmopolitan – AF1a | Original brain | KX148198a | This study |
| South Africa | 14018AFS | Feline*(Und.)* | 2000 | Africa-3 | Original brain | KX148223e | This study |
| South Africa | 15001AFS | Yellow mongoose *(Cynictis penicillata)* | 2013 | Africa-3 | Original brain | KX148220b | This study |
| South Africa | 15002AFS | Mongoose*(Und.)* | 2014 | Africa-3 | Original brain | KX148221b | This study |
| South Africa | 15003AFS | Ground squirrel *(Xerus Inauris)* | 2014 | Africa-3 | Original brain | KX148222b | This study |
| South Africa | 87021AFS | Human (*Homo sapiens*) | 1981 | Cosmopolitan – AF1b | Mouse | KX148103d | This study |
| South Korea | 08F40 | Cattle (*Bos taurus*) | 2008 | Arctic-related – AL2 | Original brain | KC171643 | (25) |
| South Korea | BD0406CC | Raccoon dog*(Nyctereutes procyonoides)* | 2004 | Arctic-related – AL2 | Original brain | KC171644 | (25) |
| South Korea | BV9901PJ | Raccoon dog*(Nyctereutes procyonoides)* | 1999 | Arctic-related – AL2 | Original brain | KC171645 | (25) |
| Sri Lanka | H\_1413\_09 | Golden palm civet*(Paradoxurus zeylonensis)* | 2009 | Indian Subcontinent | Original brain | AB635373 | (26) |
| Sri Lanka | RV2417 | Dog (*Canis familiaris*) | 2008 | Indian Subcontinent | Original brain | KF154999 | (16) |
| Taiwan | R2012\_26 | Ferret badger*(Melogale moschata)* | 2012 | Asian – SEA5 | Original brain | KF620487 | (27) |
| Taiwan | R2012\_88 | Ferret badger*(Melogale moschata)* | 2012 | Asian – SEA5 | Original brain | KF620488 | (27) |
| Taiwan | R2013\_01 | Ferret badger*(Melogale moschata)* | 2013 | Asian – SEA5 | Original brain | KF620489 | (27) |
| Tanzania | 96013TAN | Dog (*Canis familiaris*) | 1996 | Cosmopolitan – AF1b | Original brain | KX148206a | This study |
| Tanzania | RV2772 | Dog (*Canis familiaris*) | 2009 | Cosmopolitan – AF1b | Original brain | KF155002 | (16) |
| Thailand | 8764THA | Human*(Homo sapiens)* | 1983 | Asian – SEA3 | Mouse | EU293111 | (28) |
| Thailand | QS\_05 | Dog (*Canis familiaris*) | ND | Asian – SEA3 | Mouse | JN786877 | (29) |
| Turkey | 93100TUR | Dog (*Canis familiaris*) | 1993 | Cosmopolitan – ME2 | Original brain | KX148164e | This study |
| Turkey | 94001TUR | Dog (*Canis familiaris*) | 1993 | Cosmopolitan – ME2 | Original brain | KX148166b | This study |
| Turkey | 94002TUR | Dog (*Canis familiaris*) | 1993 | Cosmopolitan – ME2 | Original brain | KX148162a | This study |
| Turkey | 94005TUR | Dog (*Canis familiaris*) | 1993 | Cosmopolitan – ME2 | Original brain | KX148167e | This study |
| Turkey | 94009TUR | Dog (*Canis familiaris*) | 1993 | Cosmopolitan – ME2 | Original brain | KX148165b | This study |
| Turkey | 94016TUR | Dog (*Canis familiaris*) | 1993 | Cosmopolitan – ME2 | Original brain | KX148163e | This study |
| United Arab Emirates | 91024EAU | Fox*(Und.)* | 1991 | Cosmopolitan – ME1a | Mouse | KX148171c | This study |
| USA | 91001USA | Skunk*(Und.)* | 1982 | Cosmopolitan – AM1 | Mouse | KX148213e | This study |
| USA | 91004USA | Striped skunk(*Mephitis mephitis)* | 1991 | Arctic-related – A | Original brain | KX148224e | This study |
| USA | 91005USA | Red fox*(Vulpes vulpes)* | 1990 | Arctic-related – A | Original brain | KX148106d | This study |
| USA | 1088 | Woodchuck*(Marmota monax)* | 2008 | Cosmopolitan – AM1 | Mouse | AB645847 | (30) |
| USA | 2401 | Gray Fox*(Urocyon cinereoargenteus)* | 2009 | Bat – EF-W1 | Original brain | JQ685934 | (19) |
| USA | A02\_2971 | Bat (*Parastrellus Hesperus*) | 2002 | Bat – PH | N, P, M, G - original brain; L and termini - mouse | JQ685952 | (19) |
| USA | A02\_2972 | Bat (*Parastrellus hesperus*) | 2002 | Bat – PH | N, P, M, G - original brain; L and termini - mouse | JQ685965 | (19) |
| USA | A093500 | Bat (*Eptesicus fuscus*) | 2009 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685898 | (19) |
| USA | A093504 | Bat (*Eptesicus fuscus*) | 2009 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685950 | (19) |
| USA | A10\_0511 | Gray Fox*(Urocyon cinereoargenteus)* | 2009 | Cosmopolitan – AM2b | Original brain | JQ685943 | (19) |
| USA | A10\_0512 | Striped skunk*(Mephitis mephitis)* | 2009 | RAC-SK – SCSK | Original brain | JQ685968 | (19) |
| USA | A10\_0514 | Striped skunk*(Mephitis mephitis)* | 2009 | RAC-SK – SCSK | Original brain | JQ685938 | (19) |
| USA | A10\_0515 | Gray Fox*(Urocyon cinereoargenteus)* | 2009 | Cosmopolitan – AM2b | Original brain | JQ685899 | (19) |
| USA | A11\_1043 | Coyote*(Canis latrans)* | 2011 | Bat – EF-W2 | Original brain | JQ685973 | (19) |
| USA | A11\_5300 | Human (*Homo sapiens*) | 2011 | Cosmopolitan – AM3a | Original brain | KC737850 | McGuone *et al.,* unpublished |
| USA | AZ10\_140 | Bat (*Eptesicus fuscus*) | 2010 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685961 | (19) |
| USA | AZ3003 | Bat (*Antrozous pallidus*) | 2009 | Bat – AZ | N, P, M, G - original brain; L and termini - mouse | JQ685971 | (19) |
| USA | AZ4490 | Bat (*Myotis yumanensis*) | 2005 | Bat – MYu | N, P, M, G - original brain; L and termini - mouse | JQ685955 | (19) |
| USA | AZBAT\_6509 | Bat (*Eptesicus fuscus*) | 1981 | Bat – EF-W2 | Mouse | JQ685942 | (19) |
| USA | AZBAT\_6763 | Bat (*Eptesicus fuscu*s) | 1985 | Bat – EF-W1 | Mouse | JQ685913 | (19) |
| USA | AZBAT\_7453 | Bat (*Eptesicus fuscus*) | 1975 | Bat – EF-W1 | Mouse | JQ685956 | (19) |
| USA | CA04148 | Bat (*Eptesicus fuscus*) | 2004 | Bat – EF-W2 | N, P, M, G - original brain; L and termini - mouse | JQ685903 | (19) |
| USA | CA100 | Bat (*Eptesicus fuscus*) | 2005 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685909 | (19) |
| USA | CA982 | Striped skunk*(Mephitis mephitis)* | 1994 | Cosmopolitan – AM4 | Original brain | JQ685894 | (19) |
| USA | CASK2 | Striped skunk*(Mephitis mephitis)* | 1974 | Cosmopolitan – AM4 | Original brain | JQ685970 | (19) |
| USA | CO\_Coyot\_2 | Coyote*(Canis latrans)* | 2010 | Bat – EF-W1 | Original brain | JQ685917 | (19) |
| USA | EF | Bat (*Eptesicus fuscu*s) | 1984 | Bat – EF | mouse | JQ685920 | (19) |
| USA | FL1010 | Bat (*Lasiurus intermedius*) | 2002 | Bat – LI | N, P, M, G - original brain; L and termini - mouse | JQ685916 | (19) |
| USA | FL1078 | Bat (*Myotis autroriparius*) | 2001 | Bat – MYsp | N, P, M, G - original brain; L and termini - mouse | JQ685921 | (19) |
| USA | FL385 | Bat (*Tadarida brasiliensis*) | 2003 | Bat – TB | N, P, M, G - original brain; L and termini - mouse | JQ685905 | (19) |
| USA | FL769 | Bat (*Lasiurus seminolus*) | 2003 | Bat – LS | N, P, M, G - original brain; L and termini - mouse | JQ685900 | (19) |
| USA | NC1234 | Striped skunk*(Mephitis mephitis)* | ND | Cosmopolitan – AM1 | Original brain | JQ685967 | (19) |
| USA | NC839 | Striped skunk*(Mephitis mephitis)* | 1984 | Cosmopolitan – AM1 | Original brain | JQ685944 | (19) |
| USA | NJ2262 | Bat (*Lasiurus borealis*) | 2005 | Bat – LB | N, P, M, G - original brain; L and termini - mouse | JQ685919 | (19) |
| USA | OR05455 | Gray Fox*(Urocyon cinereoargenteus)* | 2010 | Bat – EF-W2 | Original brain | JQ685948 | (19) |
| USA | OR05506 | Gray Fox*(Urocyon cinereoargenteus)* | 2010 | Bat – MYsp | Original brain | JQ685918 | (19) |
| USA | OR8767 | Gray Fox*(Urocyon cinereoargenteus)* | 2005 | Bat – MYsp | Original brain | JQ685957 | (19) |
| USA | RAC | Raccoon*(Procyon lotor)* | 2003 | RAC-SK – RAC | Mouse | JQ685901 | (19) |
| USA | SHBRV\_18 | Human (*Homo sapiens*) | 1983 | Bat – PS | Mouse | AY705373 | (31) |
| USA | SM1545 | Striped skunk*(Mephitis mephitis)* | 2005 | Bat – EF-W1 | Original brain | JQ685941 | (19) |
| USA | SM3844 | Bat (*Eptesicus fuscus*) | 1995 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685974 | (19) |
| USA | SM3849 | Bat (*Eptesicus fuscus*) | 1996 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685907 | (19) |
| USA | SM4862 | Bat (*Eptesicus fuscus*) | 1999 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685946 | (19) |
| USA | SM4871 | Bat (*Eptesicus fuscus*) | 1999 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685923 | (19) |
| USA | SM4872 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685960 | (19) |
| USA | SM5076 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685932 | (19) |
| USA | SM5077 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685911 | (19) |
| USA | SM5079 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685893 | (19) |
| USA | SM5081 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685904 | (19) |
| USA | SM5100 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685940 | (19) |
| USA | SM5101 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685958 | (19) |
| USA | SM5440 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685969 | (19) |
| USA | SM5441 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685962 | (19) |
| USA | SM5442 | Bat (*Eptesicus fuscus*) | 2001 | Bat – EF-W1 | N, P, M, G - original brain; L and termini - mouse | JQ685897 | (19) |
| USA | SM5451 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685959 | (19) |
| USA | SM5470 | Striped skunk*(Mephitis mephitis)* | 2001 | Bat – EF-W1 | Original brain | JQ685966 | (19) |
| USA | SM5596 | Striped skunk*(Mephitis mephitis)* | 2004 | Bat – EF-W1 | Original brain | JQ685964 | (19) |
| USA | SM5950 | Gray fox*(Urocyon cinereoargenteus)* | 2004 | Bat – EF-W1 | Original brain | JQ685933 | (19) |
| USA | SM6709 | Cat*(Felis catus)* | 2005 | Bat – EF-W1 | Original brain | JQ685945 | (19) |
| USA | TN186 | Bat (*Perimyotis subflavus*) | 2005 | Bat – PS | N, P, M, G - original brain; L and termini - mouse | JQ685922 | (19) |
| USA | TN209 | Bat (*Lasiurus boreali*s) | 2005 | Bat – LB | N, P, M, G - original brain; L and termini - mouse | JQ685902 | (19) |
| USA | TN310 | Bat (*Lasiurus cinereus*) | 2004 | Bat – LC | N, P, M, G - original brain; L and termini - mouse | JQ685947 | (19) |
| USA | TX4904 | Bat (*Lasiurus intermedius*) | 2002 | Bat – LI | N, P, M, G - original brain; L and termini - mouse | JQ685915 | (19) |
| USA | TX5960 | Bat (*Lasiurus xanthinus*) | 2002 | Bat – LX | N, P, M, G - original brain; L and termini - mouse | JQ685910 | (19) |
| USA | WA0173 | Bat (*Eptesicus fuscu*s) | 2000 | Bat – EF-W2 | N, P, M, G - original brain; L and termini - mouse | JQ685931 | (19) |
| USA | WA1185 | Bat (*Lasionycteris noctivagans*) | 2003 | Bat – LN | N, P, M, G - original brain; L and termini - mouse | JQ685895 | (19) |
| USA | WAEF03 | Bat (*Eptesicus fuscus*) | 2004 | Bat – EF | N, P, M, G - original brain; L and termini - mouse | JQ685925 | (19) |
| Vietnam | 01016VNM | Dog(*Canis familiaris*) | 2001 | Asian – SEA3 | Mouse | KX148261e | This study |

The full-length genome sequences generated in the present study have been deposited to GenBank under accession numbers KX148100-KX148269 and have been obtained as follow:

a dsDNA are obtained using the 6 PCR fragments strategy and fragmented by fragmentase; libraries were prepared using NEBNext Ultra DNA Library Prep kit and sequenced using an 100 nucleotides single-end strategy on the NextSeq500 platform.

b dsDNA are obtained using the 6 PCR fragments strategy; libraries were constructed using Nextera XT kit and sequenced using a 2 x 150 nucleotides paired-end strategy on the NextSeq500 platform.

c dsDNA are obtained using the 6 PCR fragments strategy and fragmented by ultrasounds; libraries were prepared using NEXTflex PCR-Free DNA-Seq kit and sequenced using an 150 nucleotides single-end strategy on the HiSeq2500 platform.

d dsDNA are obtained using the whole-transcription amplification (WTA) protocol and fragmented by ultrasounds; libraries were prepared using TruSeq protocol and sequenced using an 100 nucleotides single-end strategy on the HiSeq2000 platform.

e dsDNA are obtained using the 6 PCR fragments strategy and fragmented by ultrasounds; libraries were prepared using NEXTflex PCR-Free DNA-Seq kit and sequenced using a 2 x 300 nucleotides paired-end strategy on the MiSeq platform.

f dsDNA are obtained using the 6 PCR fragments strategy and fragmented by ultrasounds; libraries were prepared using NEXTflex PCR-Free DNA-Seq kit and sequenced using an 100 nucleotides single-end strategy on the HiSeq2500 platform.

g sequence is obtained using a shotgun strategy as previously described (28).

*Und.*:undetermined species

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