**Table S1:** List of sequences included in the data set fromCentral and South American RABV isolates (1990 – 2008), by country,

year and source of virus.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sequence ID** | **Accession Number** | **Country** | **Year** | **Source** | **Clade** | **Bat Group** |
| 2008\_GQ160959\_BOV\_BRZ | GQ160959 | Brazil | 2008 | Bovine | 2b | IVc |
| 2008\_GQ160957\_EQ\_BRZ | GQ160957 | Brazil | 2008 | Equine | 2b | IVc |
| 2008\_FJ829028\_HUM\_BRZ | FJ829028 | Brazil | 2008 | Human | 2b | n/a |
| 2008\_FJ829027\_MAM\_BRZ | FJ829027 | Brazil | 2008 | Marmoset | 2b | n/a |
| 2008\_EU981921\_BOV\_URG | EU981921 | Uruguay | 2008 | Bovine | 2b | IVc |
| 2008\_EU981926\_BOV\_URG | EU981926 | Uruguay | 2008 | Bovine | 2b | IVc |
| 2008\_EU981919\_BOV\_URG | EU981919 | Uruguay | 2008 | Bovine | 2b | IVc |
| 2008\_EU981918\_BOV\_URG | EU981918 | Uruguay | 2008 | Bovine | 2b | IVc |
| 2008\_EU981929\_BOV\_URG | EU981929 | Uruguay | 2008 | Bovine | 2b | IVc |
| 2008\_EU981925\_BOV\_URG | EU981925 | Uruguay | 2008 | Bovine | 2b | IVc |
| 2008\_EU981917\_BOV\_URG | EU981917 | Uruguay | 2008 | Bovine | 2b | IVc |
| 2008\_EU981927\_DR\_URG | EU981927 | Uruguay | 2008 | *Desmodus rotundus* | 2b | IVc |
| 2008\_EU981928\_EQ\_URG | EU981928 | Uruguay | 2008 | Equine | 2b | IVc |
| 2008\_EU981923\_EQ\_URG | EU981923 | Uruguay | 2008 | Equine | 2b | IVc |
| 2008\_EU981924\_MM\_URG | EU981924 | Uruguay | 2008 | *Molossus molossus* | 2b | II |
| 2008\_EU981922\_MYO\_URG | EU981922 | Uruguay | 2008 | *Myotis spp* | 2a | I |
| 2008\_EU981920\_TB\_URG | EU981920 | Uruguay | 2008 | *Tadarida brasiliensis* | 2a | III |
| 2007\_GQ160919\_BOV\_BRZ | GQ160919 | Brazil | 2007 | Bovine | 2b | IVc |
| 2007\_GQ160914\_EQ\_BRZ | GQ160914 | Brazil | 2007 | Equine | 2b | IVb |
| 2007\_GU552823\_LE\_BRZ | GU552823 | Brazil | 2007 | *Lasiurus ega* | 2b | II |
| 2007\_FJ829024\_MAM\_BRZ | FJ829024 | Brazil | 2007 | Mamoset | 2b | n/a |
| 2007\_GU552796\_MM\_BRZ | GU552796 | Brazil | 2007 | *Molossus molossus* | 2b | II |
| 2007\_GU552816\_MN\_BRZ | GU552816 | Brazil | 2007 | *Myotis nigricans* | 2a | I |
| 2007\_HM368179\_BOV\_ECU | HM368179 | Ecuador | 2007 | Bovine | 2b | IVc |
| 2007\_GU991847\_DOG\_MEX | GU991847 | Mexico | 2007 | Canine | 1 | n/a |
| 2007\_FJ228543\_SKU\_MEX | FJ228543 | Mexico | 2007 | Skunk | 1 | n/a |
| 2007\_EU981931\_DR\_URG | EU981931 | Uruguay | 2007 | *Desmodus rotundus* | 2b | IVc |
| 2007\_EU981930\_DR\_URG | EU981930 | Uruguay | 2007 | *Desmodus rotundus* | 2b | IVa |
| 2006\_GQ915422\_BOV\_BRZ | GQ915422 | Brazil | 2006 | Bovine | 2b | IVb |
| 2006\_GQ915424\_BOV\_BRZ | GQ915424 | Brazil | 2006 | Bovine | 2b | IVb |
| 2006\_GQ915421\_BOV\_BRZ | GQ915421 | Brazil | 2006 | Bovine | 2b | IVb |
| 2006\_GQ915423\_BOV\_BRZ | GQ915423 | Brazil | 2006 | Bovine | 2b | IVb |
| 2006\_GQ915420\_BOV\_BRZ | GQ915420 | Brazil | 2006 | Bovine | 2b | IVb |
| 2006\_GQ915419\_BOV\_BRZ | GQ915419 | Brazil | 2006 | Bovine | 2b | IVb |
| 2006\_EF428578\_DR\_BRZ | EF428578 | Brazil | 2006 | *Desmodus rotundus* | 2b | IVb |
| 2006\_EF428576\_DR\_BRZ | EF428576 | Brazil | 2006 | *Desmodus rotundus* | 2b | IVb |
| 2006\_EF428579\_DR\_BRZ | EF428579 | Brazil | 2006 | *Desmodus rotundus* | 2b | IVb |
| 2006\_EF428580\_DR\_BRZ | EF428580 | Brazil | 2006 | *Desmodus rotundus* | 2b | IVb |
| 2006\_EF428582\_DR\_BRZ | EF428582 | Brazil | 2006 | *Desmodus rotundus* | 2b | IVb |
| 2006\_EF428577\_DR\_BRZ | EF428577 | Brazil | 2006 | *Desmodus rotundus* | 2b | IVb |
| 2006\_EF428581\_DR\_BRZ | EF428581 | Brazil | 2006 | *Desmodus rotundus* | 2b | IVb |
| 2006\_GU204250\_DR\_BRZ | GU204250 | Brazil | 2006 | *Desmodus rotundus* | 2b | IVb |
| 2006\_GQ915416\_EQ\_BRZ | GQ915416 | Brazil | 2006 | Equine | 2b | IVb |
| 2006\_GU552824\_LC\_BRZ | GU552824 | Brazil | 2006 | *Lasiurus cinerus* | 2b | II |
| 2006\_GU552822\_LE\_BRZ | GU552822 | Brazil | 2006 | *Lasiurus ega* | 2b | II |
| 2006\_GU552789\_MM\_BRZ | GU552789 | Brazil | 2006 | *Molossus molossus* | 2b | II |
| 2006\_GU552812\_MN\_BRZ | GU552812 | Brazil | 2006 | *Myotis nigricans* | 2a | I |
| 2006\_GU552786\_TB\_BRZ | GU552786 | Brazil | 2006 | *Tadarida brasiliensis* | 2b | III |
| 2005\_EF194167\_DOG\_BRZ | EF194167 | Brazil | 2005 | Canine | 1 | n/a |
| 2005\_EF152258\_HUM\_BRZ | EF152258 | Brazil | 2005 | Human | 1 | n/a |
| 2005\_EF363739\_HUM\_TuriacuMaranha\_BRZ | EF363739 | Brazil | 2005 | Human | 2b | IVb |
| 2005\_EF363757\_HUM\_ViseuPara\_BRZ | EF363757 | Brazil | 2005 | Human | 2b | IVb |
| 2005\_EF363749\_HUM\_AugustoCorreaP\_BRZ | EF363749 | Brazil | 2005 | Human | 2b | IVb |
| 2005\_FJ829027\_MAM\_BRZ | FJ829027 | Brazil | 2005 | Mamoset | 2b | n/a |
| 2005\_GU552819\_MN\_BRZ | GU552819 | Brazil | 2005 | *Myotis nigricans* | 2a | I |
| 2005\_GU552814\_MYO\_BRZ | GU552814 | Brazil | 2005 | *Myotis spp* | 2a | I |
| 2005\_GU552787\_TB\_BRZ | GU552787 | Brazil | 2005 | *Tadarida brasiliensis* | 2b | III |
| 2005\_EF363728\_HUM\_Pastaza\_ECU | EF363728 | Ecuador | 2005 | Human | 2b | IVc |
| 2005\_EF363727\_HUM\_Pastaza\_ECU | EF363727 | Ecuador | 2005 | Human | 2b | IVc |
| 2005\_GU991845\_SKU\_MEX | GU991845 | Mexico | 2005 | Skunk | 1 | n/a |
| 2005\_FJ228500\_HUM\_PERU | FJ228500 | Peru | 2005 | Human | 1 | n/a |
| 2004\_GQ915413\_BOV\_BRZ | GQ915413 | Brazil | 2004 | Bovine | 2b | IVc |
| 2004\_GQ915433\_EQ\_BRZ | GQ915433 | Brazil | 2004 | Equine | 2b | IVb |
| 2004\_EF363743\_HUM\_PortelPara\_BRZ | EF363743 | Brazil | 2004 | Human | 2b | IVc |
| 2004\_EF363748\_HUM\_PortelPara\_BRZ | EF363748 | Brazil | 2004 | Human | 2b | IVc |
| 2004\_GQ915411\_OVI\_BRZ | GQ915411 | Brazil | 2004 | Ovine | 2b | IVb |
| 2004\_EU086161\_DOG\_COL | EU086161 | Columbia | 2004 | Canine | 1 | n/a |
| 2004\_FJ228488\_BOV\_MEX | FJ228488 | Mexico | 2004 | Bovine | 2b | n/a |
| 2004\_GU991825\_HUM\_MEX | GU991825 | Mexico | 2004 | Human | 2b | n/a |
| 2004\_FJ228499\_DOG\_PERU | FJ228499 | Peru | 2004 | Canine | 1 | n/a |
| 2004\_FJ228501\_FOX\_PERU | FJ228501 | Peru | 2004 | Fox | 1 | n/a |
| 2003\_GQ915406\_BOV\_BRZ | GQ915406 | Brazil | 2003 | Bovine | 2b | IVc |
| 2003\_EF152240\_CAT\_BRZ | EF152240 | Brazil | 2003 | Feline | 1 | n/a |
| 2003\_FJ228491\_BOV\_MEX | FJ228491 | Mexico | 2003 | Bovine | 2b | n/a |
| 2003\_FJ228490\_BOV\_MEX | FJ228490 | Mexico | 2003 | Bovine | 2b | n/a |
| 2003\_GU991823\_BOV\_MEX | GU991823 | Mexico | 2003 | Bovine | 2b | n/a |
| 2003\_FJ228493\_BOV\_MEX | FJ228493 | Mexico | 2003 | Bovine | 2b | IVa |
| 2003\_GU991828\_BOV\_MEX | GU991828 | Mexico | 2003 | Bovine | 2b | IVa |
| 2003\_FJ228489\_OVI\_MEX | FJ228489 | Mexico | 2003 | Ovine | 2b | n/a |
| 2003\_GU991844\_SKU\_MEX | GU991844 | Mexico | 2003 | Skunk | 1 | n/a |
| 2002\_AB201802\_AL\_Sao Paulo\_BRZ | AB201802 | Brazil | 2002 | *Artibeus liturasus* | 2b | IVb |
| 2002\_AB297627\_ART\_Rio de Janeiro\_BRZ | AB297627 | Brazil | 2002 | *Artibeus spp* | 2b | IVb |
| 2002\_GQ915430\_BOV\_BRZ | GQ915430 | Brazil | 2002 | Bovine | 2b | IVb |
| 2002\_GQ915426\_BOV\_BRZ | GQ915426 | Brazil | 2002 | Bovine | 2b | IVb |
| 2002\_GQ915428\_BOV\_BRZ | GQ915428 | Brazil | 2002 | Bovine | 2b | IVb |
| 2002\_GQ915429\_BOV\_BRZ | GQ915429 | Brazil | 2002 | Bovine | 2b | IVb |
| 2002\_GQ915432\_BOV\_BRZ | GQ915432 | Brazil | 2002 | Bovine | 2b | IVa |
| 2002\_GQ915431\_EQ\_BRZ | GQ915431 | Brazil | 2002 | Equine | 2b | IVb |
| 2002\_AB201817\_MR\_Sao Paulo\_BRZ | AB201817 | Brazil | 2002 | *Molossus rufus* | 2a | IVb |
| 2002\_GQ915427\_OVI\_BRZ | GQ915427 | Brazil | 2002 | Ovine | 2b | IVb |
| 2002\_FJ228492\_HUM\_SAL | FJ228492 | El Salvador | 2002 | Human | 2b | n/a |
| 2002\_GU991824\_BOV\_MEX | GU991824 | Mexico | 2002 | Bovine | 2b | n/a |
| 2002\_FJ228525\_DOG\_MEX | FJ228525 | Mexico | 2002 | Canine | 1 | n/a |
| 2002\_FJ228527\_FEL\_MEX | FJ228527 | Mexico | 2002 | Feline | 1 | n/a |
| 2002\_FJ228484\_SKU\_MEX | FJ228484 | Mexico | 2002 | Skunk | 1 | n/a |
| 2001\_GQ915425\_BOV\_BRZ | GQ915425 | Brazil | 2001 | Bovine | 2b | IVb |
| 2001\_FJ649172\_BOV\_BRZ | FJ649172 | Brazil | 2001 | Bovine | 2b | IVc |
| 2001\_FJ649186\_EQ\_BRZ | FJ649186 | Brazil | 2001 | Equine | 2b | IVc |
| 2001\_FJ228517\_DOG\_HON | FJ228517 | Honduras | 2001 | Canine | 1 | n/a |
| 2001\_FJ228515\_DOG\_MEX | FJ228515 | Mexico | 2001 | Canine | 1 | n/a |
| 2001\_GU991846\_SKU\_MEX | GU991846 | Mexico | 2001 | Skunk | 1 | n/a |
| 2000\_FJ649156\_BOV\_BRZ | FJ649156 | Brazil | 2000 | Bovine | 2b | IVc |
| 2000\_FJ649184\_EQ\_BRZ | FJ649184 | Brazil | 2000 | Equine | 2b | IVb |
| 2000\_FJ228516\_DOG\_MEX | FJ228516 | Mexico | 2000 | Canine | 1 | n/a |
| 2000\_FJ228533\_DOG\_MEX | FJ228533 | Mexico | 2000 | Canine | 1 | n/a |
| 2000\_FJ228545\_SKU\_MEX | FJ228545 | Mexico | 2000 | Skunk | 1 | n/a |
| 1999\_FJ649103\_BOV\_BRZ | FJ649103 | Brazil | 1999 | Bovine | 2b | IVc |
| 1999\_FJ649104\_BOV\_BRZ | FJ649104 | Brazil | 1999 | Bovine | 2b | IVc |
| 1999\_AB083803\_BOV\_MorinhosGoias\_BRZ | AB083803 | Brazil | 1999 | Bovine | 2b | IVc |
| 1999\_FJ649178\_EQ\_BRZ | FJ649178 | Brazil | 1999 | Equine | 2b | IVc |
| 1999\_GU991826\_BOV\_MEX | GU991826 | Mexico | 1999 | Bovine | 2b | n/a |
| 1999\_FJ228485\_BOV\_MEX | FJ228485 | Mexico | 1999 | Bovine | 1 | n/a |
| 1999\_FJ228507\_DOG\_MEX | FJ228507 | Mexico | 1999 | Canine | 1 | n/a |
| 1999\_GU991827\_HUM\_MEX | GU991827 | Mexico | 1999 | Human | 2b | n/a |
| 1999\_GU991830\_TBM\_MEX | GU991830 | Mexico | 1999 | *Tadarida brasiliensis mexicana* | 2b | IVa |
| 1998\_AB117970\_AL\_BRZ | AB117970 | Brazil | 1998 | *Artibeus liturasus* | 2b | IVb |
| 1998\_AB117969\_AL\_Sao Paulo\_BRZ | AB117969 | Brazil | 1998 | *Artibeus liturasus* | 2b | IVb |
| 1998\_AB117972\_AP\_BRZ | AB117972 | Brazil | 1998 | *Artibeus planirostris* | 2b | IVb |
| 1998\_FJ649075\_BOV\_BRZ | FJ649075 | Brazil | 1998 | Bovine | 2b | IVb |
| 1998\_FJ649074\_BOV\_BRZ | FJ649074 | Brazil | 1998 | Bovine | 2b | IVb |
| 1998\_FJ649176\_EQ\_BRZ | FJ649176 | Brazil | 1998 | Equine | 2b | IVb |
| 1998\_FJ829025\_HUM\_BRZ | FJ829025 | Brazil | 1998 | Human | 2b | n/a |
| 1998\_FJ829026\_MAM\_BRZ | FJ829026 | Brazil | 1998 | Mamoset | 2b | n/a |
| 1998\_FJ228523\_DOG\_MEX | FJ228523 | Mexico | 1998 | Canine | 1 | n/a |
| 1997\_EU293116\_TB\_ARG | EU293116 | Argentina | 1997 | *Tadarida brasiliensis* | 2b | III |
| 1997\_FJ649057\_BOV\_BRZ | FJ649057 | Brazil | 1997 | Bovine | 2b | IVb |
| 1997\_FJ649056\_BOV\_BRZ | FJ649056 | Brazil | 1997 | Bovine | 2b | IVb |
| 1997\_AF070449\_DR\_BRZ | AF070449 | Brazil | 1997 | *Desmodus rotundus* | 2b | IVb |
| 1997\_FJ649173\_EQ\_BRZ | FJ649173 | Brazil | 1997 | Equine | 2b | IVb |
| 1996\_AY854587\_VAM\_Morelos\_MEX | AY854587 | Mexico | 1996 | Vampire bat | 2b | IVa |
| 1996\_AF045166\_HUM\_PERU | AF045166 | Peru | 1996 | Human | 2b | IVb |
| 1995\_FJ228524\_DOG\_MEX | FJ228524 | Mexico | 1995 | Canine | 1 | n/a |
| 1995\_FJ228532\_DOG\_MEX | FJ228532 | Mexico | 1995 | Canine | 1 | n/a |
| 1994\_FJ228522\_BOV\_MEX | FJ228522 | Mexico | 1994 | Bovine | 1 | n/a |
| 1994\_FJ228511\_BOV\_MEX | FJ228511 | Mexico | 1994 | Bovine | 1 | n/a |
| 1994\_2787\_BOV\_VENZ | 2787**¥** | Venezuela | 1994 | Bovine | 2b | IVc |
| 1994\_2797\_BOV\_VENZ | 2797**¥** | Venezuela | 1994 | Bovine | 2b | IVc |
| 1993\_2784\_BOV\_VENZ | 2784**¥** | Venezuela | 1993 | Bovine | 2b | IVc |
| 1993\_2782\_BOV\_VENZ | 2782**¥** | Venezuela | 1993 | Bovine | 2b | IVc |
| 1991\_FJ228531\_CAP\_MEX | FJ228531 | Mexico | 1991 | Caprine | 1 | n/a |
| 1991\_FJ228521\_DOG\_MEX | FJ228521 | Mexico | 1991 | Canine | 1 | n/a |
| 1991\_FJ228514\_DOK\_MEX | FJ228514 | Mexico | 1991 | Donkey | 1 | n/a |
| 1991\_FJ228510\_POR\_MEX | FJ228510 | Mexico | 1991 | Porcine | 1 | n/a |
| 1990\_EU293113\_DOG\_GUY | EU293113 | French Guiana | 1990 | Canine | 2b | IVa |
| 1990 \_AY877433\_BOV\_Chiapas\_MEX | AY877433 | Mexico | 1990 | Bovine | 2a | IVa |
| 1990\_FJ228519\_FEL\_MEX | FJ228519 | Mexico | 1990 | Feline | 1 | n/a |

**¥** Sequences obtained from the repository of the Rabies Program, CDC and the Wildlife Zoonoses and Vector-borne Diseases Research Group , Animal Health & Veterinary Laboratories Agency (Weybridge)