

Electronic Supplementary Material

Characterization of the First Genome of *Porcine mastadenovirus B* (HNU1 Strain) and Implications on Its Lymphoid and Special OriginShu-Jing Liu^{1#}, Qiong Wang^{1#}, Ting-Ting Li², Si-Hua Zhang³, Jin-Yan Li¹, Li-Jun Wu⁴, Ye Qiu^{1✉}, Xing-Yi Ge^{1✉}

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A Pol

PAdV-SVN1	RGRCYPTYLGVHEEKIYVYDTCGMYASALTHEFVWGSPLNPFRRALAVRTWAHRISQR.APIDVFDTSRBAIFITIDANPPDETLLDVLPPFCRKS	103
PAdV-B-HNU1	RGRCYPTYLGVHEEKIYVYDTCGMYASALTHEFVWGSPLNPFRRALAVRTWAHRISQR.APIDVFDTSRBAIFITIDANPPDETLLDVLPPFCRKS	103
PAdV-C	RGRCYPTYLGVHEEKIYVYDTCGMYASALTHEFVWGSPLNPFRRALAVRTWAHRISQR.APIDVFDTSRBAIFITIDANPPDETLLDVLPPFCRKS	104
PAdV-A	RGRCYPTYLGVHEEKIYVYDTCGMYASALTHEFVWGSPLNPFRRALAVRTWAHRISQR.APIDVFDTSRBAIFITIDANPPDETLLDVLPPFCRKS	103
C.Sea lion AdV-1	RGRCYPTYLGVHEEKIYVYDTCGMYASALTHEFVWGSPLNPFRRALAVRTWAHRISQR.APIDVFDTSRBAIFITIDANPPDETLLDVLPPFCRKS	103
PAdV-SVN1	NEPLRGEVATSDVTLNHRGWRVLIIDERTVVMVDFEETIAREYVOLNIAKEKADKENNOTIRSIKLLSNALYGSPA	183
PAdV-B-HNU1	NEPLRGEVATSDVTLNHRGWRVLIIDERTVVMVDFEETIAREYVOLNIAKEKADKENNOTIRSIKLLSNALYGSPA	183
PAdV-C	NEPLRGEVATSDVTLNHRGWRVLIIDERTVVMVDFEETIAREYVOLNIAKEKADKENNOTIRSIKLLSNALYGSPA	184
PAdV-A	NEPLRGEVATSDVTLNHRGWRVLIIDERTVVMVDFEETIAREYVOLNIAKEKADKENNOTIRSIKLLSNALYGSPA	183
C.Sea lion AdV-1	NEPLRGEVATSDVTLNHRGWRVLIIDERTVVMVDFEETIAREYVOLNIAKEKADKENNOTIRSIKLLSNALYGSPA	183

B Hexon

PAdV-WI	GGCAASEYLSGLVQFARATETVFIQIGKFRNPTMAPTHDVTTERSQRQLQRFVPIVREDTQVATKRFQLVGDNRVLDMASTFEDIRGRLDRGFSFKPYSGTAYNPLA	110
PAdV-SVN1	GGCAASEYLSGLVQFARATETVFIQIGKFRNPTMAPTHDVTTERSQRQLQRFVPIVREDTQVATKRFQLVGDNRVLDMASTFEDIRGRLDRGFSFKPYSGTAYNPLA	110
PAdV-B-HNU1	GGCAASEYLSGLVQFARATETVFIQIGKFRNPTMAPTHDVTTERSQRQLQRFVPIVREDTQVATKRFQLVGDNRVLDMASTFEDIRGRLDRGFSFKPYSGTAYNPLA	110
PAdV-C	GGCAASEYLSGLVQFARATETVFIQIGKFRNPTMAPTHDVTTERSQRQLQRFVPIVREDTQVATKRFQLVGDNRVLDMASTFEDIRGRLDRGFSFKPYSGTAYNPLA	110
PAdV-A	GGCAASEYLSGLVQFARATETVFIQIGKFRNPTMAPTHDVTTERSQRQLQRFVPIVREDTQVATKRFQLVGDNRVLDMASTFEDIRGRLDRGFSFKPYSGTAYNPLA	110
C.Sea lion AdV-1	GGCAASEYLSGLVQFARATETVFIQIGKFRNPTMAPTHDVTTERSQRQLQRFVPIVREDTQVATKRFQLVGDNRVLDMASTFEDIRGRLDRGFSFKPYSGTAYNPLA	110
PAdV-WI	PRSGVNNCEYKGSDD...NENTYVLAGISMPGIEYDPAQLKVIKEENGRECEVVAADKSYQEBPCIGLESWTEGLLEEMKMPVVGARGLNLDVEHT	202
PAdV-SVN1	PRSGVNNCEYKGSDD...NENTYVLAGISMPGIEYDPAQLKVIKEENGRECEVVAADKSYQEBPCIGLESWTEGLLEEMKMPVVGARGLNLDVEHT	202
PAdV-B-HNU1	PRSGVNNCEYKGSDD...NENTYVLAGISMPGIEYDPAQLKVIKEENGRECEVVAADKSYQEBPCIGLESWTEGLLEEMKMPVVGARGLNLDVEHT	202
PAdV-C	PRSGVNNCEYKGSDD...NENTYVLAGISMPGIEYDPAQLKVIKEENGRECEVVAADKSYQEBPCIGLESWTEGLLEEMKMPVVGARGLNLDVEHT	193
PAdV-A	PRSGVNNCEYKGSDD...NENTYVLAGISMPGIEYDPAQLKVIKEENGRECEVVAADKSYQEBPCIGLESWTEGLLEEMKMPVVGARGLNLDVEHT	200
C.Sea lion AdV-1	PRSGVNNCEYKGSDD...NENTYVLAGISMPGIEYDPAQLKVIKEENGRECEVVAADKSYQEBPCIGLESWTEGLLEEMKMPVVGARGLNLDVEHT	202

Figure S1. Multiple alignment of the amino acid sequences of different PAdVs. Partial amino acid sequences of DNA polymerase (A) and hexon (B) of the indicated PAdVs were aligned using DNAMAN. Dots indicate gaps.

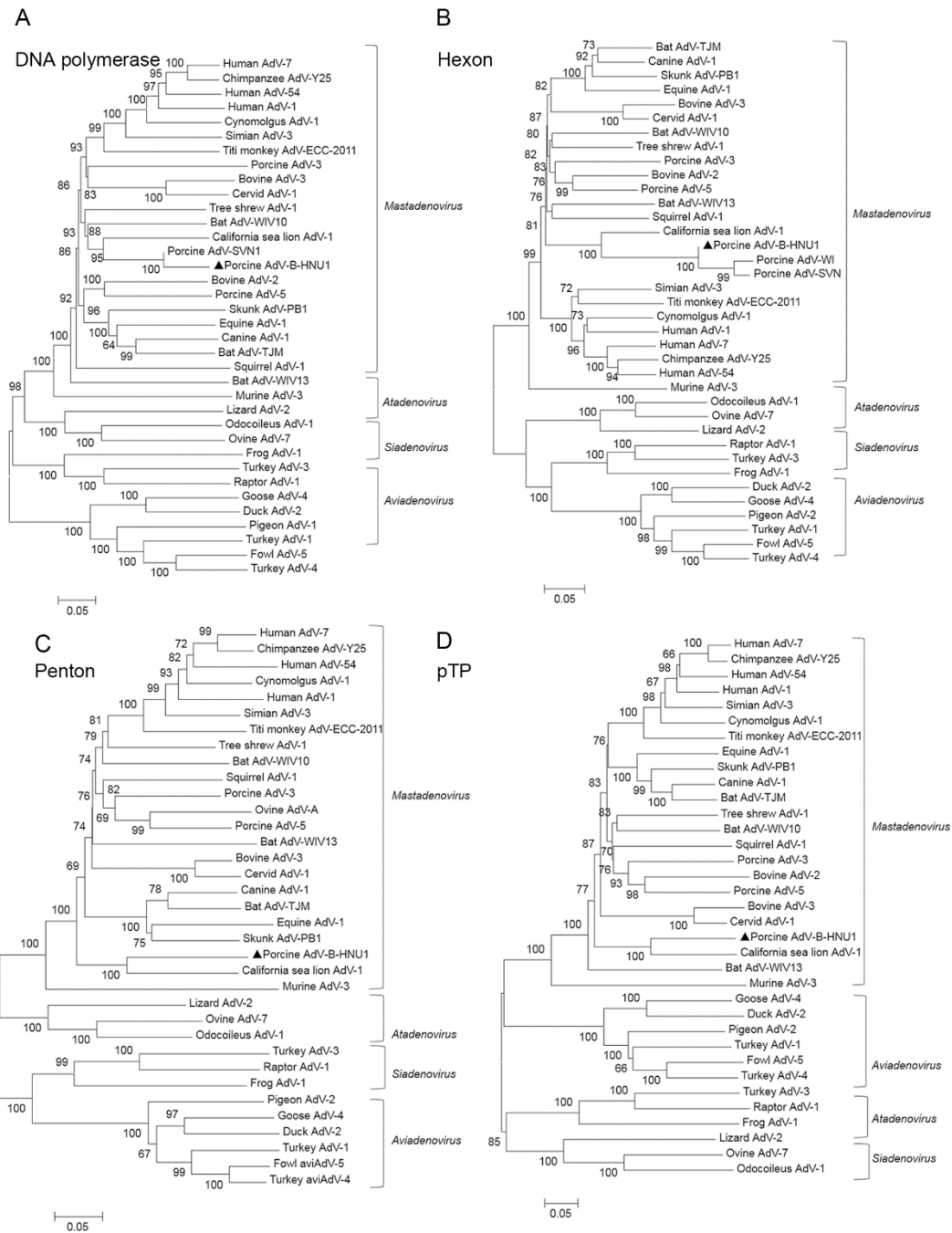


Figure S2. Neighbor-Joining tree based on putative conserved protein. PAdV-B-HNU1 detected in this study was indicated with solid triangle.

Table S1. Nucleotide sequence identities of the complete genomes of PAdV-B-HNU1 and other adenoviruses.

Genus	Strain	Nucleotide Sequence Identity (%)
<i>Mastadenovirus</i>	California sea lion AdV-1	54.1
	Bat AdV-WIV10	49.9
	Skunk AdV-PB1	52.1
	Equine AdV-1	52.7
	Cynomolgus AdV-1	51.1
	Cervid AdV-1	50.8
	Murine AdV-3	48.8
	Canine AdV-1	51.8
	Chimpanzee AdV-Y25	50.1
	Bat AdV-WIV13	47.5
	Titi monkey AdV-ECC-2011	50.4
	Bat AdV-TJM	53.3
	Human AdV-1	50.2
	Human AdV-7	50.3
	Porcine AdV-3	51.9
	Tree shrew AdV-1	49.9
	Bovine AdV-3	51.3
	Bovine AdV-2	50.6
	Squirrel AdV-1	48.1
	Porcine AdV-5	51.6
Simian AdV-3	51.7	
Human AdV-54	50.8	
<i>Aviadenovirus</i>	Turkey AdV-1	37.9
	Goose AdV-4	36.8
	Fowl AdV-5	37.4
	Pigeon AdV-2	38.6
	Turkey AdV-4	38.4
	Duck AdV-2	37.1
<i>Siadenovirus</i>	Frog AdV-1	41.3
	Raptor AdV-1	41.5
	Turkey AdV-3	41.2
<i>Atadenovirus</i>	Odocoileus AdV-1	41.9
	Ovine AdV-7	42.1
	Lizard AdV-2	42.6