

## SUPPLEMENTARY MATERIALS

**Tabel S1:** GenBank accession numbers of papillomavirus L1 genes and corresponding host cytochrome b nucleotide sequences, used in the phylogenetic analysis, sorted in the alphabetical order.

PV type	GenBank accession no. (of the L1 gene)	Host	GenBank accession no. of the cytochrome b region
AplaPV1	MK620303	<i>Anas platyrhynchos</i> (mallard)	EU755253
AsPV1	HQ625440	<i>Anas rubripes</i> (American black duck)	AF059088
BgPV1	JX174437	<i>Apodemus sylvaticus</i> (wood mouse)	AB033695
BPV1	X02346	<i>Bison bonasus</i> (European bison)	KP866277
BPV2	M20219	<i>Bos grunniens</i> (yak)	AB542193
BPV5	AF457465	<i>Bos Taurus</i> (cow)	D34635
BPV8	DQ098913	<i>Bubalus bubalis</i> (water buffalo)	D88637
BPV13	JQ798171	<i>Canis lupus</i> (dog)	EU352854
BPV14	KP276343	<i>Capra ibex</i> (Alpine ibex)	AF034735
BPV25	MG252779	<i>Capreolus capreolus</i> (roe deer)	KJ558325
CcaPV1	MT774140	<i>Cervus elaphus</i> (red deer)	AB001612
CPV20	KT901797	<i>Eptesicus isabellinus</i> (meridional serotine)	EU786824
EePV1	FJ379293	<i>Eptesicus serotinus</i> (serotine bat)	MF038481
EsPV1	NC038518	<i>Equus asinus</i> (common donkey)	FJ428527
EsPV2	KC858264	<i>Equus burchellii</i> (plains zebra)	JF718888
EsPV3	KC858265	<i>Equus caballus</i> (horse)	D82932
FarcPV1	MK620302	<i>Erinaceus concolor</i> (white-breasted hedgehog)	KF783121
HPV6	HG793870	<i>Erinaceus europaeus</i> (European hedgehog)	KF783119

HPV8	M12737
HPV16	LC456627
HPV18	LC509006
LsmiPV1	MK620304
LsmiPV2	MK620330
MaegPV1	MH616908
MaPV1	HG530538
MfPV3	EF558839
MfPV4	EF558841
MfPV5	EF558843
MfPV6	EF558840
MfPV7	EF558838
MfPV8	EF558842
MfPV9	EU490516
MfPV10	EU490515
MfPV11	GQ227670
MmiPV1	DQ269468
MmPV1	M60184
MmuPV1	GU808564
MnPV1	U01834
MscPV1	JQ814848
OaPV1	U83594

<i>Felis catus</i> (cat)	AB004238
<i>Fratercula arctica</i> (Atlantic puffin)	DQ385228
<i>Giraffa camelopardalis</i> (giraffe)	LT628417
<i>Hippotragus niger</i> (sable antelope)	AF022061
<i>Homo sapiens</i> (human)	U09500
<i>Larus marinus</i> (great black-backed gull)	AJ508140
<i>Larus smithsonianus</i> (American herring gull)	FM209896
<i>Macaca fascicularis</i> (long-tailed macaque)	AF295584
<i>Macaca mulatta</i> (rhesus macaque)	U38272
<i>Mastomys natalensis</i> (Natal multimammate mouse)	AF518342
<i>Melanogrammus aeglefinus</i> (haddock)	DQ020497
<i>Mesocricetus auratus</i> (Syrian hamster)	KY754035
<i>Micromys minutus</i> (harvest mouse)	AB033697
<i>Miniopterus schreibersii</i> (Schreibers's bat)	EF530348
<i>Mus musculus</i> (house mouse)	LC325158
<i>Ovis aries</i> (sheep)	D84205
<i>Ovis gmelini</i> (mouflons)	D84203
<i>Pan paniscus</i> (pygmy chimpanzee)	D38116
<i>Pan troglodytes</i> (common chimpanzee)	X93338
<i>Papio hamadryas</i> (hamadryas baboon)	AF295585
<i>Peromyscus maniculatus</i> (deer mouse)	MN124384
<i>Phodopus roborovskii</i> (Roborovski hamster)	GU797468

OaPV2	U83595
OaPV4	KX954121
PhPV1	JF304764
PmPV1	NC039039
PpPV1	X62844
*PpPV1 <sup>Cc</sup>	AF020905
PsuPV1	HG939559
<sup>a</sup> PsuPV1 (APV 475)	MW602287
<sup>b</sup> PsuPV1 (APV 480)	MW602286
<sup>c</sup> PsuPV1 (APV 516)	MW602285
RaIPV1	KT626573
RfPV1	NC038527
RnPV1	GQ180114
SsPV1	EF395818

\* PpPV1 isolated from a common chimpanzee.

<sup>a,b,c</sup> PsuPV1 isolates obtained in this study.

PV – papillomavirus; AplaPV – Anas platyrhynchos papillomavirus; AsPV – Apodemus sylvaticus papillomavirus; BgPV – Bos grunniens papillomavirus; BPV – Bos taurus papillomavirus; CcaPV – Capreolus capreolus papillomavirus; CPV – Canis familiaris papillomavirus; EePV – Erinaceus europaeus papillomavirus; EsPV – Eptesicus serotinus papillomavirus; FarcPV – Fratercula arctica papillomavirus; HPV – human papillomavirus; LsmiPV – Larus smithsonianus papillomavirus; MaegPV – Melanogrammus aeglefinus associated papillomavirus; MaPV – Mesocricetus auratus papillomavirus; MfPV – Macaca fascicularis papillomavirus; MmiPV – Micromys minutus papillomavirus; MmPV – Macaca mulata papillomavirus; MmuPV – Mus musculus papillomavirus; MnPV – Mastomys natalensis papillomavirus; MscPV – Miniopterus schreibersii papillomavirus; OaPV – Ovis aries papillomavirus; PhPV – Papio hamadryas papillomavirus; PmPV – Peromyscus papillomavirus; PpPV – Pan paniscus papillomavirus; PsuPV – Phodopus sungorus papillomavirus; RaIPV – Rusa alfredi papillomavirus; RfPV – Rhinolophus ferrumequinum papillomavirus; RnPV – Rattus norvegicus papillomavirus; SsPV – Sus scrofa papillomavirus.

<i>Phodopus sungorus</i> (Siberian hamster)	AF119266
<i>Procyon lotor</i> (raccoon)	GU175439
<i>Rattus norvegicus</i> (brown rat)	AB033713
<i>Rhinolophus ferrumequinum</i> (greater horseshoe bat)	AB085731
<i>Rupicapra rupicapra</i> (chamois)	AF034725
<i>Rusa alfredi</i> (spotted deer)	JN632698
<i>Sus domesticus</i> (pig)	AB015079
<i>Tapirus bairdii</i> (tapir)	JF718880