

Supplementary Table S1. HPV6, HPV11 and HPV16 E5, E6 and E7 protein sequences.

Gene	Protein sequence	HPV type	Reference
HPV16-E6	MHQKRTAMFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYD FAFRDLCIVYRDGNPYAVCDKCLKFYISKISEYRHYCYSLYGTTLEQQYNKPL CDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSSCRSSRTRR ETQL	16	NP_041325.1
HPV16-E7	MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRA HYNIVTFCCCKCDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP	16	NP_041326.1
HPV16-E5	MTNLDTASTTLLACFLLCFCVLLCVCLLIRPLLLSVSTYTSLLILVLLLWITAAS AFRCFIVYIIFVYIPLFLIHTHARFLIT	16	NP_041330.2
HPV18*-E6	MARFEDPTRRPYKLPDLCTELNTSLQDIEITCVYCKTVLELTVFEFAFKDLF VVYRDSIPHAACHKCIDFYSRIRELRHYSDSVYGDLEKLTNTGLYNLLIRCL RCQKPLNPAEKLRLHLEKRRFHNIAGHYRGQCHSCCNRARQERLQRRRET QV	18	NP_040310.1
HPV18*-E7	MHGPKATLQDIVLHLEPQNEIPVDLLCHEQLSDSEENDEIDGVNHQHLPAR RAEPQRHTMLCMCKCEAIELVVESSADDLRAFQQLFLNLTLSFVCPWCASQ Q	18	NP_040311.1
HPV18*-E5	MLSLIFLCFCVCMYVCCHVPLLPVCMCAYAWVLVVFYIVVITSPATAFTV YVFCFLPMLLLHIHAILSLQ	18	NP_040315.1
HPV6*-E6	MESANASTSATTIDQLCKTFNLSMHTLQINCVFCKNALTTAEIYSYAYKHLK VLFRGGYPYAAACACCLEFHGKINQYRHFYAGYATTVEEETKQDILDVLIR CYLCHKPLCEVEKVKHILTKARFIKLNCTWKGRCCLHCWTTCMEDMLP	6	NP_040296.1
HPV6*-E7	MHGRHVTLKDIVLDLQPPDPVGLHCYEQLVDSEDEVDEVDGQDSQPLKQ HFQIVTCCCGCDNSVRLVVQCTETDIREVQQLLGLTNIVCPICAPKT	6	NP_040297.1
HPV6*-E5	MMLTCQFNDGDTWLGLWLLCAFIVGMLGLLLPHYRAVQGDKHTKCKKC NKHNCNDDYVTMHYTTDGDYIYMN	6	NP_040302.1
HPV11*-E6	MESKDASTSATSIDQLCKTFNLSLHTLQICVFCRNALTTAEIYAYAYKNLK VVWRDNFPFAACACCLELQGKINQYRHFNYAAYAPTVEEETNEDILKVLIR CYLCHKPLCEIEKLKHILGKARFIKLNNQWKGRCCLHCWTTCMEDLLP	11	QXM18822.1
HPV11*-E7	MHGRLVTLKDIVLDLQPPDPVGLHCYEQLEDSEDEVKVDKQDSQPLTQ HYQILTCCCGCDNSVRLVVECTDGDIRQLQDLLGLTNIVCPICAPKP	11	QXM18823.1
HPV11*-E5A	MEVVPVQIAAATTTTLILPVVIAFAVCFLSIVLILISDFLVYTSVLVLTLLLYLL LWLLLTPLQFFLLTLCVCYFPAFYIHIVYVQTQQ	11	QXM18827.1
HPV11*-E5B	MVMLTCHLNDGDTWLFLWLFTAFAVAVLGLLLLHYRAVHGTEKTKCAKC KSNRNTTVDYVYMSHGDNGDYVYMN	11	QXM18828.1

HPV18*: Alphapapillomavirus 7: human papillomavirus 18 is a serotype of Alphapapillomavirus 10.
 HPV6*: Alphapapillomavirus 10: human papillomavirus 6 and 11 are serotypes of Alphapapillomavirus 10.
 HPV11*: Alphapapillomavirus 10: human papillomavirus 6 and 11 are serotypes of Alphapapillomavirus 10