

						
	10	20	30	40	50	60
PDB 2B9D A	-----	-----	-----	-----	-----Q	PYAVVASCAY
16CNTZ01 E7	MHGDTPTLHE	YMLDLQPETT	DLYCYEQLSD	SSEEEDEIDG	PAGQAEPDRA	HYNIVTFCK
PDB 2B9D A	-----	-----	-----	-----	-----Q	PYAVVASCAY
31CNTZ04 E7	MRGETPTLQD	YVLDLQPEAT	DLYCYEQLPD	SSDEEDVIDS	PAGQAEPDTS	NYNIVTFCCQ
PDB 2B9D A	-----	-----	-----	-----	-----Q	PYAVVASCAY
33CNTZ01 E7	MRGHKPTLKE	YVLDLYPEPT	DLYCYEQLSD	SSDEDEGLDR	PDGQAQPATA	DYYIVTCCHT
PDB 2B9D A	-----	-----	-----	-----	-----	QPYAVVASCA
35CNTZ01 E7	MHGEITTLQD	YVLDLEPEAT	DLYCYEQLCD	SSEEEEDTID	GPAGQAKPDT	SNYNIVTSCC
PDB 2B9D A	-----	-----	-----	-----	-----	QPYAVVASCA
52CNTZ05 E7	MRGDKATIKD	YILDLQPETT	DLHCYEQLGD	SSDEEDTDGV	DRPDGQAEQA	TSNYYIVTYC
PDB 2B9D A	-----	-----	-----	-----	-----	QPYAVVASCA
58CNTZ01 E7	MRGNNPTLRE	YILDLHPEPT	DLFCYEQLCD	SSDEDEIGLD	GPDGQAQPAT	ANYYIVTCCY

				
	70	80	90	
PDB 2B9D A	CEKLVRLTVL	ADHSAIRQLE	EMLLRSLNIV	CPLCTLQR
16CNTZ01 E7	CDSTLRLCVQ	STHVDIRTLE	DLIMGTLGIV	CPICSQKP
PDB 2B9D A	CEKLVRLTVL	ADHSAIRQLE	EMLLRSLNIV	CPLCTLQ-
31CNTZ04 E7	CESTLRLCVQ	STQVDIRILQ	ELLMGSFGIV	CPNCSTRL
PDB 2B9D A	CEKLVRLTVL	ADHSAIRQLE	EMLLRSLNIV	CPLCTLQ
33CNTZ01 E7	CNTTVRLCVN	STASDLRTIQ	QLLMGTVNIV	CPTCAQQ
PDB 2B9D A	YCEKLVRLTV	LADHSAIRQL	EEMLLRSLNI	VCPLCTLQ-
35CNTZ01 E7	KCEATLRLCV	QSTHIDIRKL	EDLLMGTFGI	VCPGCSQRA
PDB 2B9D A	YCEKLVRLTV	LADHSAIRQL	EEMLLRSLNI	VCPLCTLQ-
52CNTZ05 E7	HSCDSTLRLC	IHSTATDLRT	LQQMLLGTLQ	VVCPGCARL
PDB 2B9D A	YCEKLVRLTV	LADHSAIRQL	EEMLLRSLNI	VCPLCTLQ
58CNTZ01 E7	TCGTTVRLCI	NSTTTDVRTL	QQLLMGTCTI	VCPSCAQQ

Figure S4. The template-target pairwise sequence alignment for α -9 HPV E7