**Supplementary File S6. Alignment of cypoviral WIV domains**

>Dendrolimuspunctatuscypovirus1|NP\_149153.1/282-388 hypothetical protein LdCPV1s8gp1 [Cypovirus 1]

FLSSVFVSLFEAWFVRMLPLIKLGKPVYIMPGTIKWD----KEVQITDTKIRYYNSV-SGRLILAEMESITR

ALQPGELEDRKEL-VRRTLETVCA-----GNNIYVL---TGNDTFGVLE

>Operophterabrumatacypovirus18|ABB17218.1/295-401 unknown [Operophtera brumata cypovirus 18]

FYRAIFMSLFASWYRLMQDVIALGKPLYILPGSFEWN----DAVELSQSKIRYRTST-NGNAVLGVMTSIEG

ALQPNEFVDRKQL-IQEALAAAIG-----DDPVHVI---VGLDTIGVLR

>Lymantriadisparcypovirus14|NP\_149142.1/267-378 hypothetical protein LdcV14s8gp1 [Cypovirus 14]

LVLHIELS---ELMTRARLLLSKFMKVYLVPSDLDWN--ELRTITIDGITLQYRTTLKDSNSILCESELISK

VFEMYRGSERLFQ-YKDQLCSMIGMHISGDPTIFIC---SNACGLMLAK

>Thaumetopoeapityocampacypovirus5|AJC97792.1/786-896 RNA 5 protein [Thaumetopoea pityocampa cypovirus 5]

FAKQVFSSLIEGHMNFMHKKEWDVKPILIVT-GDHYA--DFERLSIEGLRY---GVTKDKKFNVFESTTLTA

TLNKIMDRREKLN-LKKGIELEIDAVAREFG--YVT-TKDNDEYIAIRK

>Heliothisarmigeracypovirus5|YP\_001883319.1/787-897 p5 [Cypovirus 5]

FTRQVFSSLIEGQMNFMHKKEWDAKPILMVT-GKKYA--DFEELSIEGLRY---GITKDKKFNVFESTTLTA

TLNKVTNEEERIK-LKKGIELEIDAVAKDFG--YVT-TKDDDEYIAIKR

>Hubeilepidoptera3|QJB76100.1/772-884 VP5 protein [Hubei lepidoptera virus 3]

VNEMIAKELIMTHIDFMEKVELDERPILIMINDERNK--IYEKKTKNDIRY---GETMDKEMNVFESMTIKR

MYEKIQKEEKRQSFLKDELTKLIERTVRERG--YEV-KTNDMGDIMLVK

>Hubeilepidoptera3\_/767-879 LdCPV3|YP\_009330260.1/1-880 Cypovirus VP5 [Hubei lepidoptera virus 3]

MKEKVVNALMLTHIDFMEKVEMDERPIIMVARSEKYS--GYETKMKGTIRY---GETNDRKYNVFESNTIKK

VIQDEMRSGGNERATTEAVLNMLKISLHKRG--YVV-ETNEEGDIIIRK

>Antheraeamylittacypo4|ABF83587.1/415-530 P61 [Antheraea mylitta cypovirus 4]

F-TAMVDSLAYNHLRFFKTANLDDDKFLITI-GSKYAIEDF--TSIEGLKTN-HKRHKTSNLLLFQSTSLEG

LLAAAGDDRLKRTYIFDTIEKSFNKYLEEDGSDYSMFQQRTSGVIGLMK

>Daphnisneriicypo23|YP\_009551580.1/526-641 hypothetical protein [Daphnis nerii cypovirus]

F-KTMVESLIKTHLSFLHSTNPTADRIIITY-GKKYKADDFELEMVNGFRV---MTHKKSKISAFKSETIEN

LLKMAGDDEAKRNMIYDVIDNIMSSCLSEAESPYTSFQQRHLNVIGLMR