```
                          1                                   10        20        30        40        50
CD47_HUMAN                QL....................LF.....LFNKTKSVEFTFCNDTVVIPCFVTNMEAQNTTEVYVKWKFKGRDIYTFDGALNKST
Variola_virus             MLRVR...I.............LL.IYLCT.F.VVITSTKTIEYTACNDTIIIPCTIDNP......TKYIRWKLDNHNILTYNKTS.KTI
Ectromelia_virus          MLRVR...I.............SL.IYLYT.L.VVITTTKTIEYTACNDTIIIPCTIDNP......TKYIRWKLDNHDILTYNKTS.KTT
Cowpox_virus              MSRVR...I.............SL.IYLYT.L.VVITTTKTIEYTACNDTIIIPCTIDNP......TKYIRWKLDNHDILTYNKTS.KTT
Myxoma_virus              MIGL..................LFF.VYVVP.L.AAENEVTVTPYTVCNKTVTLECNLDALIYKDINSVHVKWLFDTMYDTISNKT......
Swinepox_virus            MKIFL.................LLL.LCYYP.V.LSKFIFFTNEFTICNDTVSVHCDISSLIYSNISDIHVNWSLNNHNINHKHTI......
Sheeppox_virus            MFYFK...KK.KINIIF....LFLTIYINSSFSILENNFSSIIYSKCNKTIVIDCNINHFVKY.NENITINWFFNNYPLLKKNNT......
Rabbit_fibroma_virus      MRTSC...IA.SIAHVG....LLL.VVFVH.L.TVGNKVTVMPYTVCNTTTLECNLDELIYKDINSIHVKWLFYTMDDTISNIT......
Goatpox_virus             MFYFK...KK.KVKIIF....LFLTIYINSSFSILENKVSSINYSKCNKSIVIDCNINHFVKY.NENVTINWFFNNYPLLKKNNT......
Monkeypox_virus           MLRVR...I.............LL.IYLCT.F.VVITSTKTIEYTACNDTIIIPCIIDNP......TKYIRWKLDNHDILTYNKTS.KTT
Akhmeta_virus             MLRVR...I.............SL.IYLYT.L.FVITTTKTIEYTACNDTIIIPCTIDNP......TKYIRWKLDNHDILTYNKTS.KTT
Tanapox_virus             MYMYM...YM.....YN....YII.ICLFK...LSLSTYIKVNYTTCNSSIYIVCSSNLPY.....NSIIEWKFNNKVILNNNNT......
Cotia_virus               MKNIL...F......YY....ILF.I.FNI.Y.IVYSNNITINYTLCNNTITIPCIFNKNV.....NIPVNWTYNNIKIINKDVL.....
Deerpox_virus             MLNIS...SLVSIRIYFFILTIFI.CFYCS.E.QTLTTVNSVMYTSCNKTILLTCNLDKLIYDNISNIDIRWKVDGNSIFLVNKTY....
Yokapox_virus             MLL...................KL.FYLYT.V.TYIANSKTIEYTPCNDTIIIPCYISNP......TKYITWKLDNHVIIIYNKTT.SST
Taterapox_virus           MLRVR...I.............LL.IYLCT.F.VVITSTKTIEYTACNDTIIIPCTIDNP......TKYIRWKLDNHDILTYNKTS.KTT
Skunkpox_virus            MENSK...L.............LLVIYFTL.F.VDIIKTKTIEYTACNDTIIIPCTIDNP.......KYIRWKLDNHDILIYNMTS.KTT
Volepox_virus             MHKITNSKL.............LLVIYLTL.F..DIVTTKTIEYTACNNTVIIPCTIDNP.......TYVRWRLDNHDILIYNRTS.KTT
Camelpox_virus            MLRVR...I.............LL.IYLCT.F.VVITATKTIEYMACNDTIIIPCTIDNP......TKYIRWKLDNHDILTYNKTS.KTT
Moosepox_virus            MLNIS...SLVSIRIYFFILTIFI.CFYCS.E.QTLTTVNSVTYTSCNKTILLTCNLDKLIYDNTSNIDIRWKVDGNSIFLVNKTY....
Yaba_monkey_tumor_virus   MHTYN...Y.............II.FFLFK...LISCSYIRVNYTTCNSVVNVVCDVKLPY.....NSAVEWRFNNKVIFYSNNT......
Horsepox_virus            MLRVR...I.............LL.IYLCT.F.MIITSTKTIEYTACNNTIIIPCTIDNP......TKYIRWKLDNHDILTYNKTS.KTT
Alaskapox_virus           MIRIS.................L.IYIYM.L.IVMTTTKNIEYTACNDSIIIPCTIDNP......TKYIRWKFDNHDILTYNKTS.KMS
consensus>70              m.......................iy.............ie%t.CN.t!.i.C.id...........!.W..dn..i...n.t.....

                          60        70        80        90        100       110       120       130       140
CD47_HUMAN                VPTDF.SSAKIEVSQLLKGDASLKMDKS.DAVSHTGNYTCEVT....ELTREGETIIELKYRVVSWFSPNENILIVIFPIFAILLFWGQF
Variola_virus             ILSKWHTSAR..LHSLSDNDVSLIMEYK.DI..LPGTYTCEDN....TGI...KSTVKLVQRHTNWFNDHHTMLMFIFTGITLFLLFLEI
Ectromelia_virus          ILSKWHTSAR..LHSLSDNDVSLIMEYK.DI..LPGTYTCGDN....TGI...KSTVKLVQCHTNWFNDYQTTLMFIFTGITLFLLFLEI
Cowpox_virus              ILSKWHTSAR..LHSLSDSDVSLIMEYK.DI..LPGTYTCEDN....TGI...KSTVKLVQLHTNWFNDYQTMLMFIFTGITLFLLFLEI
Myxoma_virus              ...................NGSSITFDFA.NN..LTGNYTCEAYSEFN.SV...KHVIAL.TFVHQWFSREEIQFILSLLTIYIILLWGNV
Swinepox_virus            ..................HNITTLLFNFS.KD..INGNYTCEASGKFN.KI...IHTTYV.SYTVKWFNHEERCVIISLLIIYIVIVWGQL
Sheeppox_virus            ...................STQKLILDFS.KY..LYGNYTCYVINNDNILL...KKTIQL.KYIIKWLNEKEINTVFIMLSIYVIILWGKI
Rabbit_fibroma_virus      ...................NGSFIKFDFA.KN..LSGNYTCEAYSDLN.SV...KNVIAL.NLVHQWFSREELQFILSLLTIYIILLWCNV
Goatpox_virus             ...................NTQKLILDFS.KY..LYGNYTCYVINNNNILL...KETIQL.KYIIKWLNKKEINTVVILSIYVIILWGKI
Monkeypox_virus           ILSKWHTSAR..LHSLSDSDVSLIMEYK.DI..LPGTYTCGDN....TGI...KSTVKLVQRHTNWFNDYQTMLMFIFTGITLFLLFLEI
Akhmeta_virus             ILSKWHTSAR..LHSLSDSDVSLIMEYK.DI..LPGTYTCEDN....TGI...KSTVTLIQRHINWFNDHQTMLMFIFTGVTLFLLFLEI
Tanapox_virus             ......................LKFNFN.NN..LSGNYTCKALN....L....FNKIEL.QLVTNWVTSEEKTVILYLLVTKLVVLWITI
Cotia_virus               ...................KLNFLYNLSEHV..LTCSYKIK....NN.YI...KNDIYL.KFTNKLFSDSEVDFIICTVYIIMLTIWIDI
Deerpox_virus             ..................YNLSSLLFNFS.TS..LTGNYTCEAASKFN.KI...KNIIML.QYTSEWFTKEEIEIVISMLSIFIILLWSEL
Yokapox_virus             MLSKWHKSAK..LRLASENDMSLIIKYK.DI..LPGNYTCSDS....TGV...KSNIQLVFKETHWFNDYDTMLIFIFSGVTLVLLLLQV
Taterapox_virus           ILSKWHTSAR..LHSLSDNDVSLIEYK.DI..LPGTYTCEDN....TGI...KSTVKLVQRHTNWFNDHHTMLMFIFTGITLFLLFLEI
Skunkpox_virus            ILSKWHTSAR..LHSLADNDISLIMEYK.DI..LPGNYTCENN....KGI...KHTVKLIQRHTNWFNDHQTMLMFIFTGVTLLLLMSQI
Volepox_virus             ILSKWHTSAR..LHSLADNDISLIMEYK.DI..LPGNYTCDNN....KGI...KYTVNLIQRHTNWFNDHQTMLMFIFTGITLLLLVAQI
Camelpox_virus            ILSKWHTSAK..LHSLSDNDVSLIIEYK.DM..LPGTYTCEDN....TGI...KSTVKLVQRHTNWFNDHHTMLMFIFTGITLFLLFLEI
Moosepox_virus            ..................YNLSSLLFNFS.TS..LTGNYTCEAASKFN.KI...KNIIML.QYTSEWFTKEEIEIVISMLSIFIILLWSEL
Yaba_monkey_tumor_virus   ......................LKFKFN.NN..LFGNYTCKTFD....V.....FNKIEL.KLITEWITSEEKIISSMLIAYLIISWMTI
Horsepox_virus            ILSKWHTSAR..LHSLSDSDVSLIIEYK.DI..LPGTYTCGDN....TGI...KFTVKLVQRHTNWFNDYQTMLMFIFTGITLFLLFLEI
Alaskapox_virus           ILSKWHTSAK..LHSLSDNDVSLIMEYK.DI..LPGTYTCEDN....TGI...KSNVTLIRRHTNWFNDHQIMLMFIFTGVTLFLLALEI
consensus>70              ......................l..ey......l.g.Ytc.........i...k..i.l.....nwf...e.........i...ll..ei

                                150       160       170       180       190       200       210       220
CD47_HUMAN                GIKTLKYRSGGMDEKTIALLVA...GLVITVIVIVGAILFV.PGEYSLKNATGLGLIVTSTGILILLHYYVFSTAIGLTSFVIAILVIQV
Variola_virus             AYTSISVVF...STNLGILQVF...GCIIAMIELCGAFLFY.PSMFTLRHIIGLLMMTLPSIFLIITKVFSFWLLCKLSCAVHLIIYYQL
Ectromelia_virus          AYTSISVVF...STNLGILQVF...GCVIAMIELCGAFLFY.PSMFTLRHIIGLLMITLPSIFLIITKVFSFWLLCKLSCAVHLIIYYQL
Cowpox_virus              TYTSISVVF...STNLGILQVF...GCVIAMIELCGAFLFY.PSMFTLRHIIGLLMMTLPSIFLIITKVFSFWLLCKLSCAVHLIIYYQL
Myxoma_virus              CT..ITFKI...NNVSKLIHVY.SIALWMTLIMFVGQYMIGIDTDMLYVKVNGIILIQLSIFSSIFLQRILHK.KLIPSYLLNIVLGLKA
Swinepox_virus            II..LIFKH...RNISNFIYIY.AISIWSTLIMLVGQYMISFVTELMYVYIQGIVLIQFSMLSFLFLQKYIYE.QFEYRYMFIIFIIKV
Sheeppox_virus            IATTIKFKL.SFKKDKKIIYLYYYIGFVITLIMLLGQYMIGLNTNNIFIRILGTSFIQVSIFISIILQIIFFKKKFKNTLSLITVFLLHF
Rabbit_fibroma_virus      YT..ITSKT...SNISKLIHVY.SIALWMTIIMFVGQYMIGINTDMIYVKINGIILIQLSIISSVFLQRILHK.TIIPSYLLNIVMGLKV
Goatpox_virus             IATTIKFKL.SFKKDKKIIYLYYYIGFVITLIMLLGQYMIGLNTNNILIRILGTSFIQLSIFISIILQIIFFKKKFKNTLSLITVFLLHF
Monkeypox_virus           AYTSISVVF...STNLGILQVF...GCVIAMIELCGAFLFY.PSMFTLRHIIGLLMMTLPSIFLIITKVFSFWLLCKLSCAVHLIIYYQL
Akhmeta_virus             TYTSISVVF...STNLGILQVF...GCVIAMIELCGAFLFY.PSMFTLRHIIGLLMMTLPSIFLIITKVFSFWLLCKLSCAVHLIIYYQL
Tanapox_virus             LT..LSLKI...NKFKKKVINLY.ATLIWVTILCLFIQYILRLNKKYSFIDIYGIMLISVLLFSSIGVNVLTLLKIKKNKYLIVI.IILKT
Cotia_virus               FI..VTFRI...NNTKHIINYY.VSIILTTITTISGQYIIL.NEYF...ESYGISLIQLSIFIFVIIQIKLYT.YLNQSYFFLLLANIQM
Deerpox_virus             IT..ITFKL...NKLKRIIYLY.AVSLWITLILLIGQYMISISSIFTFVKVQGIILIQISILISMFVQIHLYK.YVENSYLIIGNLVLQV
Yokapox_virus             IYTSISIRF...TNNVGILQFF...CVIIIMIELSGSLLFY.PSKFNMRHIIGLLMLTIPSIFLIVTKIFSFWVLNKLSFGVHVIIYYQL
Taterapox_virus           AYTSISVVF...STNLGILQVF...GCIIAMIELCGAFLFY.PSMFTLRHIIGLLMMTLPSIFLIITKVFSFWLLCKLSCAVHLIIYYQL
Skunkpox_virus            AYTSISVIY...STNLGILQVF...GCIIAMIEVSGAFLFY.PSMFTLRHIIGLLMMTLPSIFLIITKVFSFWILSKLSCGVHLIIYYQL
Volepox_virus             AYTSISVIY...STNMGILQVF...GCIVVMIEVSGVFLFY.PPMFTLRHIIGLLMMTLPSIFLIITKVFSFWILSKLSCGVHLIIYYQL
Camelpox_virus            AYTSTSVVF...STNLGILQVF...GCIIAMIELCGAFLFY.PSMFTLRHIIGLLMMTLPSIFLIITKVFSFWLLCKLSCAVHLIIYYQL
Moosepox_virus            IT..ITFKL...NKLKRIIYLY.AVSLWITLIMLVGQYMISISSVFIFVKVQGIILIQISILISMFVQIHLYK.YVENSYLIIGNLVLQV
Yaba_monkey_tumor_virus   LT..LSFKI...DRLKRVINLH.AILIWITILGVYIQYMLKLSKGYSFIDVCGIVLITVLLFSSIFVNVLTLLKIKKKKCFIVI.IILKT
Horsepox_virus            AYTSISVVF...STNLGILQVF...GCIIAMIELCGAFLFY.PSMFTLRHIIGLLMMTLPSIFLIITKVFSFWLLCKLSCAVHLIIYYQL
Alaskapox_virus           MYTSISVVF...STNLGILQVF...GCVIAMVELCGAFLFY.PPMFTLRHIIGLLMMTLPSIFLIITKVFSFWLLCKLSCSVHLIIYYQL
consensus>70              ....i...........i...f......i.mi...g.fl......f....i.G..m........i...v..f......s..v..i.....

                          230       240       250       260       270       280       290       300
CD47_HUMAN                IAYILAVVGLSLCIAACIP.MHGPLLISGLSILALAQLLGLVYMKFVASNQKTIQPPRKAVEEPLNAFKESKGMMNDE.
Variola_virus             AGYILTVLGLGLSLKECV...DGTLLLSGLGTIMVSEHFSLLFLVCFPSTQRDYY.......................
Ectromelia_virus          AGYILTVLGLGLSLKECV...DGTLLLSGLGTIMVSEHFSLLFLVYFPSTQRDYY.......................
Cowpox_virus              AGYILTVLGLGLSLKECV...DGTLLLSGLGTIMVSEHFSLLFLVCFPSTQRDYY.......................
Myxoma_virus              VSYTGSTVVIALSFIGCYNKAYGYTYMYKLLFADILELISLIALYTLPLGTQATYKKLYLQSDETFTF..L.......
Swinepox_virus            ILFLISSIIIILSFNGCYKSIYGYLFMYKLLVIDILSLSCLAISVITPLRKNINYKQLHIIQSDSFPFLLKSDYDENCI
Sheeppox_virus            ISYIISLIMFTMSLIGCYNEIYGKVIVYKLSLVIIFEFISLLSLFIFSLNTSIKYRKLHIIEDENLLFSI........E
Rabbit_fibroma_virus      LSFTGSTIVIALSFVGCYNKAYGYTYVYKLLFADVLELISLITLYVLPFGTQTTYKRLYLQSDETFTF..P........
Goatpox_virus             ISYIISLIMFTMSLIGCYNEIYGKVIVYKLLLVIIFEFISLLSLFIFSLNTSIKYRKLHIIEDENLLFSI........E
Monkeypox_virus           AGYILTVLGLGLSLKECV...DGTLLLSGLGTIMVSEHFGLLFLVCFPSTQRDYY.......................
Akhmeta_virus             AGYILTVLGLGLSLKECV...DGTLLLSGLGTIMVSEHFSLLFLVCFPSTQRDYY.......................
Tanapox_virus             VASILFFLVYLLILFYCYKNVFGLFLIYNLLIINIFELSYLVCLLIIPIELRIKYKKLIMIKSNLNL............
Cotia_virus               IFFITSTIIIIISKSECYKYIYSCIYSYSIVFILIFSHFYMIILLIAPITYKVKYSNFDIILY...............
Deerpox_virus             ISYLISCIILILSFVGCYNQIYIYLFIYKLLFINVLELCNLVLLFITPLGHNIIYKKLHVTTDDIESFSIG........
Yokapox_virus             AGYVLTILGLGLSLKECV..IDGSLLLSGLGIISISEHFSLLLVCFQSIHREYY.......................
Taterapox_virus           AGYILTVLGLGLSLKECV...DGPLLLSGLGTIMVSEHFSLLFLVCFPSTQRDYY.......................
Skunkpox_virus            AGYILTVLGLGLSLKECV...DGTLLLSGLGTIMVSEHFSLLFLVCFPSAQRDYY.......................
Volepox_virus             AGYILTVLGIGLSLKECV...DGTLLLSGLGTIMVSEHFSLLFLVCFPSTQRDYY.......................
Camelpox_virus            AGYILTVLGLGLSLKECV...DGTLLLSGLGTIMVSEHFSLLFLVCFPSTQRDYY.......................
Moosepox_virus            ISYLISCIILILSFVGCYNQIYIYLFIYKLLFINVLELCNLVLLFITPLGHNIIYKKLHVTTDDIESFSIG........
Yaba_monkey_tumor_virus   ITSVLFFLTTLVILFYCYKSIFGSLLIYKLLIINVFELSHLVILFILPVEFKIEYKKLIILNSNLNL............
Horsepox_virus            AGYILTVLGLGLSLKECV...DGTLLLSGLGTIMVSEHFSLLFLVCFPSTQRDYY.......................
Alaskapox_virus           SGYILTVLGLGLNLKECA...DGTLLLSGLGTIMVSEHFSLLFLVCFPSTQRDYY.......................
consensus>70              ..yi.......ls...C.....g.l....l..i.v.e...$..l...p......y.........................
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