

Supporting Figure 3:

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HERV-K -----MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSSEEQMKLPSTKK
MMTV      MPKHQSGSPIGSSDLLSGKKQRPHLALRRKRREMRKINRKVRRMNLAPI-----
JSRV      MPKRRAGFRKGWYA-----RQRNSLTHQMQRMTLSEP-----T
enJSRV18  MPKRRAGFRKGWYA-----RQRNSLTHQHRMTLSEP-----T
                                     *:  :.:.:.:*  :

HERV-K      AEPPTWAQLKKLTLQATKYLENTKVTQTPESMLLAALMIVSMVVSLPMPAGAAAANYTYW
MMTV      KEKTAWQHLOALIF-E-A-EEVLKTSQTPQTSITLFLALLSV---LG---PPPVTGESYW
JSRV      SELPTQRQIEALMRYAWN-EAHVQPPVTPTNILIMLLLL--L---QR---VQNGAAAFW
enJSRV18  SELPTQRQIEALMRYAWN-EAHVQPPVTPTKILIMLLLL--L---QR---IQNGAASAFW
          *  :  :.:. *      :  ** . *  *  :  :      :  :.:.

HERV-K      AYVFPPLIRAVTWMDN-PIEVYVNDVWVPGPIDDRCPAKPE---EEGMINISIGYR
MMTV      AYLPKPPILHPVWGNTDPIRVLTNQTIYLGSPDFHGFRNMSGNVHFEKSD-----
JSRV      AYIPDPPMIQSLGWDRE-IVPVYVNDTSLGGKSDIHIS-PQOANISFYGLTT-----
enJSRV18  AYIPDPPMIQSLGWDKE-TVPVYVNDTSLGGKSDIHIS-PQOANISFYGLTT-----
          **: *  **: :  : *      :  *  . **: :  *  *  :      .      *

HERV-K      YPICLG---RAPGCLMPAVQNWLVVPTVSPISRFTYHVMVSGMSLRPRV--NYLQDFS
MMTV      TLPICFSFSFSTPTGCFQVDKQVFLSDTPTVDNNKP-----GGKGDKRRMWELWLTTLG
JSRV      QYPMCFSYQSQHP-HCIQVSADISYPRVTISGIDEK-----TGKK-----SYG
enJSRV18  QYPMCFSYQSQHP-HCIQVSADISYPRVTISGIDEK-----TGKR-----SYR
          *: :.      * :      :      .      .      *

HERV-K      YQ-RSLKFRPKGKPCPKEIPKES-----KNTVVLWEECVANSV--ILQNEF
MMTV      NSGANTKLVPIKKKLPPKYPHCQIAFKKDAFWEGDESAPPRWLPACAFPDQGVSFSPKCAL
JSRV      NGS-----GPLDIPFCDKHL SI-----GIGIDTPWTLCRARVASVYNINNANA
enJSRV18  DGT-----GPLDIPFCDKNLSI-----GIGIDTPWTLCRARIASVYNINNANT
          * . * .      * *      * *      :

HERV-K      GTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAVDSDLTESLDKHKHKKLQSFYP-----
MMTV      GLLWDFSLSPSVDQSDQIKSK-----KDLFGNYTPPV---NKEVHRWYEAGWVEPT
JSRV      TFLWDWAPGGTP-DFPEYRGQH-----PPIFSVNTAP-----
enJSRV18  TLLWDWAPGGTP-DFPEYRGQH-----PPILSVNTAP-----
          : * : : . . . .      : . *

HERV-K      WEWGEKGISTPRPKIISPVSQPEHPPELWRLTVASHHIRIWSGNQTLERDRKPFYTVDLN
MMTV      WFWENSPKD---PNDRDF TALVPHTELFRLVAA-----SRYLILKR---PGFQ
JSRV      -----IYQTELWKL LAAF GHGN-----SLYLQPNISGSKYGDVG
enJSRV18  -----IFQTELWKL LAAF GHGN-----SLYLQPNISGSKYGDVG
          : ** : * . : : *      * .      : . * * * * . * : .      : :

HERV-K      SSLTVPLQSCVKPPYMLVVG N-----IVIKPDSQTITCENCRL LTCIDSTFNWQHRILLV
MMTV      EHDMIPTSACVTPHAILLGLPQLIDIEKRGSTFHISCSSCRLTNCLDSSAYDYA-AIIV
JSRV      VTGFLYPRACVPYPFMLIQGH--MEITLSLNIYHLNCSNCILTNCIRGVAKGEQ-VIIV
enJSRV18  VTGFLYPRACVPYPFMLIQGH--MEITLSLNIYHLNCSNCILTNCIRGVAKGEQ-VIIV
          :      **: * . : : *      * .      : . * * * * . * : .      : :

HERV-K      RAREGVWIPVSMD-RPWEASPSIHILTEVLKGVLNRSKRFIFTLIAVIMGLIAVTATAAV
MMTV      KRPPYVLLPVDIGDEPWFDDSAIQTF-R-YATDLIRAKRFVAAILGISALIAIITSFAV
JSRV      KQPAFVMLPVEIA-EAWYDETALELLQR-INTALSRPKRGLSLIILGIVSLITLIATAVT
enJSRV18  KQPAFVMLPVEIT-EAWYDETALELLQR-INTALSRPKRGLSLIILGIVSLITLIATAVT
          :      * : **: : . * . : : : .      * * * * : : * * . **: : : .

HERV-K      AGVALHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRMLSLEHR
MMTV      ATTALVKEMQTATFVNNLHRNVTLALSEQRIIDLKLEARLNALEEVLQGDVANLKR
JSRV      ASVSLAQSIQAAHTVDSL SYNVTKVMGTQEDIDKKIEDRLSALYDVVRVLGEQVQSINFR
enJSRV18  ASVSLAQSIQAAHTVDSL SYNVTKVMGTQEDIDKKIEDRLSALYDVVRVLGEQVQSINFR
          * . : * . : **: : * : . * * . * * * : : . * : * : * : : : : *

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HERV-K FQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGR--EDNLTLDISKLKEQIFEASKAH
MMTV MSTRCHANYDFICVTPLPYNASE-SWERTKAHLLGIWNDNEISYNIQELTNLISDMSKQH
JSRV MKIQCHANYKVICVTKKPYNTSDFPDKVKKHLQGIWFNTNLSLDLLQLHNEILDIENSP
enJSRV18 MKIQCHANYKVICVTKKPYNTSDFPDKVKKHLQGIWFNTNLSLDLLQLHNEILDIENSP
:. :*. * . :*: * ** *: *: .: ** * : ::: : : * : * : .:

HERV-K LNLVPGTEAIAGVADGLANLNPVTWVKT---IGSTTIINLILILVCLFCLLLVCRCTQQL
MMTV IDTVDLGLAQSFANGVKALNPLDWTQYFIFIGVGALLV--IVLMIFPIVFQCLAKSLD
JSRV KATLNIADTVDNFLQNLFSNFPSSLHSLWKTLLIGVGILVFI--IIV--VILIFPCLVRGMV
enJSRV18 KATLNIADTVDNFLQNLFSNFPSSLHSLWRSIIAMGAVLTV--VLI--IICLAPCLIRSIV
: : .. :: * * . : : : : . : *

HERV-K RRDSDHRE-----RAMMTMAVLSKRKGGNVGKSKRDQIV-TVSV-
MMTV QVQSDLN-----VLLLKKKKGGNAAPAAEMVELPRVSYT
JSRV RDFLKMRVEMLMK^{YRNM}LQHQLMELLLKNKERGDAGDDP-----
enJSRV18 KEFLHMRVLI----HKNMLQHQLMELLLKNKERGAAGDDP-----
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