



IBDV $\alpha 19$ $\eta 10$ $\eta 11$ $\alpha 20$ $\alpha 21$

660 670 680 690 700 710

IBDV PLDEF LAEWSELSEFGEAFEG..FNIKLTVTSESLAELNKPVPKPK...PNVNR.PVNTGG..LKA^VSNA

BSNV PLDTL TRDW^EKMTE^FSDIFEDLPIDTKLEVTS^EF^LQRLNLRGERKQ...PNV^NKHHLRTKG..LKK^CVSA

IPNV DV^TGF^LDDW^NNMSE^FGGDLE^G..ITLSEPLTNQTLVDINTPLDSFD...PKAR^PQTPRS^RPKKTLD^EVTTA

DrXV DL^DKA^IGKAV^VEAS^PFSEVISL^LSLDR^RPMH^EQNYA^QVLY^QQKTI^EKKEAK^PK^VS^NPLY^KR^DKET^YH^E^YT^TR

IBDV $\alpha 0$

720

IBDV LK.....

BSNV LK.....

IPNV IT.....

DrXV MARRM^RINDDMVGPQWEP^IIINLVTKLYPREATGENQKSRESMTRVKIRGLLENMERQLESNGRSM^DVWYNA

IBDV $\alpha 22$ $\eta 12$ $\alpha 23$ $\alpha 24$

730 740 750 760 770 780

IBDVTGRYRNEAGLSGLVLLATARSRLQDAVKAKAEAEK^LH^KSKPDDPDADWFERSETLS^DLLEKAD

BSNVQGACRNPTTVAGLKLTA^YSKSRINKAKAVFDEINNLPKT^ESDDD...WSDRMDDADRLMKANN

IPNVSGTYKDPKSAVWRLLDQRTKLRVSTLRDQALALKPASSVDN...WABATEELAQ^QQQLLM

DrXV YLTGKKP^SGV^DK^KL^LAT^LLV^LL^APK^RTK^KLP^SGV^YQ^KLLGYPP^ID^KSPVPSLTSDEAYLYDTNSLEYNRIA

IBDV $\alpha 25$

790 800 810 820 830 840

IBDV IAS^KV^AHSALV^ETS^DAL^EAV^QSTSV^YTPKYPEV^KKNPQTAS^NNPV^VGLHLPA^KRATGVQA^ALL

BSNV LYM^REARSAL^EEDVHNSLLALSGETV^KAK^A.KTPQEKSTEV^SNPV^VGYRLPA^ERTGVQH^ALL

IPNV KAN^NL^LKSSLT^ETREALE^TIQSDKIIAGKSNPEKNPGTAA^NNPV^VGYGEFS^EKI^IPLTPT^QKK

DrXV YVS^KL^LNEDDIT^TVYANK^YMV^YSSTL^LLSN^LLLPDKV^DWP^ELS^RMN^VEGASDPY^QV^KGYK^KEL^K