

\* 20 \* 40 \* 60 \* 80 \* 100  
Cp: -----MKNVHSIDPAVTKMLEIARKQGMETAWDRYLAQKPCQGGFGLGICRN~~C~~NMGPCRTDFFGEGPQKGVGATADTIVAR  
Ct: -----MTKQCKVSI~~D~~PAVCEMVEKARRVKVETVWDRYQAMLPQCGGEGTGL~~C~~RE~~C~~LQGP~~C~~RIDFFGGEPKLGIGATADVIVAR  
Cy: -----MAKLSKTSIDPAVVEVMEKAKSMEIKTVWDRYQAMVPQCGGEGTGL~~C~~RE~~C~~HLMG~~C~~PRINEFFGGEPKRGIGATADVIVAR  
Ch: -----MAQNLKSTDRAVQOML~~D~~KAKREGICTVWDRY~~E~~AMKPCQCGGEGTGL~~C~~RE~~C~~LQGP~~C~~RINFFFGDEPKVGI~~G~~ATAEVI~~V~~IVAR  
Mt: MPRFRDL~~S~~HNC~~R~~PSEAPRVMEPKNRDRTVDPAVLEMLVSKDDKVI~~T~~AFDRFVAQQPQCKI~~G~~YEGIC~~R~~E~~F~~CMAG~~C~~PRIKATDGP~~S~~RGIGASAWTIVAR  
Rr: -----MTHDCAHCS~~S~~DACATEMLNLAEANSIETAWH~~R~~VEYKQ~~P~~QCGGFSAGL~~C~~RI~~C~~L~~C~~LG~~C~~PCRTDFFGEGPKYGVGADRD~~T~~IVAR

\* 120 \* 140 \* 160 \* 180 \* 200  
Cp: NLLRMTAAGASAHSDHGRDVVETLRGVGTGEAKDYTIK~~D~~EKKLMTLCKEFNITTE~~D~~KSIHEIAQELGEAALEFFGTQ--KGYIQ-TIERVFLORKEIWKN  
Ct: GLDRATAAGAAASHSGHARHLAHTLKLAAGKARDYTIK~~D~~KAKLRSVAARLGIPTGRSIAEIALDVAAALAD~~E~~HEK--DTPVMWAATTVTKRRLR~~F~~E  
Cy: GLDRATAAGAAASHSGHARHLAHTLKMVAKKEARDYSIK~~D~~KNKLYKVAESLGIPTGKSEDKIALAVADAALSD~~E~~NEKPT~~E~~APTAWVAKTTEKRRNLLTE  
Ch: NGLRMTAAGAAASHSGHAKHLAHTLKKAVQGAAS~~Y~~MIK~~D~~RTK~~L~~HSIAKRLGIPTGQKDEIALEVAKAALAD~~E~~HEK--DTPVLWVTTVLP~~S~~RVKVLSA  
Mt: NVGLMLTGA~~A~~AHCEHGNHIAHALVEMAEKAPDYSVK~~D~~EAKLKEVCRRVGIEVEGKSVLEL~~A~~QEVGEKAL~~E~~D~~E~~RRLKGEAEATWLMTTINEGRK~~E~~K~~F~~RT  
Rr: HLVRMTAAGTAAHSEHGRHIALAMQHSIQGELHDYSIR~~D~~EAKLYAI~~A~~KT~~L~~GVATEGRLLAIVGD~~L~~AAITLGD~~E~~Q~~N~~QDYDKPCAWLAASLTP~~R~~RVKRLGD

\* 220 \* 240 \* 260 \* 280 \* 300  
Cp: LGIIPRGIDREIVESLHRT~~H~~MGVDHDPASILLHGIRCSL~~D~~GWCGSMLAT~~E~~FS~~D~~VLFGT~~E~~PIRGQCNLGVIREDAVNLVVH~~G~~SPVLS~~E~~MLVEAVQDPE  
Ct: KGLLRKGDIEYVSDIMHRTSYGVDADPNLLGGIRCSL~~D~~LACGYMGTDMADILFGTECPVVTEANMGVLKADAVNVAVH~~G~~SPVLS~~E~~IVIVAK--E  
Cy: QGLMPKGDIEYISDIMHRTSMGCDADPNLLQAGIRAGL~~D~~LACCTMGTEISDILFGTECPVVTEANMGVLKADAVNVAVH~~G~~SPVLS~~E~~IIIVEVAE--D  
Ch: HGLIPAGIDHEIAEIMHRTSMGCDADAQNLLGGIRCSL~~D~~LACGYMGTDLADILFGTECPVVTEANMGVLKADAVNVAVH~~G~~SPVLS~~E~~IIIVSVSK--E  
Mt: HNVVPGI~~H~~ASISELVNQA~~H~~MGVDNDPNLVFSAIRVAL~~D~~YTGEHIA~~T~~DFSDILFGTECPVVTEANMGVLDPQVNFV~~L~~H~~G~~SPVLS~~E~~IIIVQAR--E  
Rr: LGLLPHNIDASVAQ~~T~~MSRTHVGDADPTNLLGGIRVAMADLD~~E~~SGMLATELSDALEGTECPVVSAANLGV~~M~~KRGAVNIAVNH~~G~~SPVLS~~E~~IIICDVA--D

\* 320 \* 340 \* 360 \* 380 \* 400  
Cp: LEALAKKNCAS-GINLVGMCCTGNEILMRHGIP~~S~~AGNFL~~E~~QELAVMTGALFAMVVDV~~Q~~CIMPSLAQLASCYHTKFIST~~S~~PKAKFP~~G~~ALHIQFEEH~~F~~FALDV  
Ct: MEAEA~~K~~AAGAS-GINVVGICCTGNEVLMREGIPACTHSVSQEMALVTGALDAMVVDV~~Q~~CIMPSLATVAECMGT~~K~~LIT~~T~~MEIAKI~~B~~GA~~I~~HIEFSEKAGEK  
Cy: MKGEAQAVGAK-GVNVVVICCTGNEVLMREGIPACTHSLSQEMALITGALDAMVVDV~~Q~~CIMPSLATVAECMGT~~K~~LIT~~T~~METMKLPGAIHIEFEEKAKDI  
Ch: MENEARAACAT-GINVVGICCTGNEVLMREGIPACTHSVSQEMAMITGALDAMITD~~Q~~CIC~~I~~PSVATTAECTGT~~V~~IT~~T~~MEMSKI~~T~~GATHVNF~~A~~EEAAVEN  
Mt: MEGEA~~K~~AAGAK-GINLVGICCTGNEVLMREGIPLVTSFASQELAICTGALDAMCVVDV~~Q~~CIMPSISAVAF~~C~~YHT~~R~~IIT~~T~~ADNAKI~~B~~GA~~V~~HIDYQTATAIES  
Rr: LRDEATAAGAAEGINIIGICCTGNEVLMREGVPLATNYLSQELPILTGALFAMVVDV~~Q~~CIMPSLPRIAE~~C~~FHT~~Q~~IIT~~T~~DKHNKI~~S~~GA~~I~~HVPFDEH~~R~~AVET

\* 420 \* 440 \* 460 \* 480 \* 500  
Cp: AREIVRQAIENYPH~~R~~N--KSRV~~E~~LPKETA~~E~~YVCGESV~~E~~AL~~E~~ALGGTWT----P~~L~~EAIKSKKIRGIAALV~~G~~NN~~N~~KV~~T~~H~~D~~YNHVNMTKALIAQ~~V~~L~~V~~V  
Ct: AREIIRLALETFT~~R~~RR--GK~~V~~VDIP~~P~~YKTKV~~V~~AGESV~~E~~AV~~K~~ALSKLNAEDPLK~~F~~LIDQIAAGNIRGVCLFAG~~C~~NN~~V~~KV~~P~~QD~~N~~FTAIARRLLKENV~~L~~V  
Cy: AREIIRQAIQAF~~T~~CR--GK~~V~~VDIP~~Q~~VK~~H~~RVVAGESV~~E~~AV~~I~~VALSKLNAEDPLK~~F~~LIDNIVSGNLRGVCLFAG~~C~~NN~~V~~KV~~P~~QD~~N~~FTIMVRRMLKENV~~L~~V  
Ch: AKQIIRLAIDTFK~~R~~RK--GK~~V~~ETPNIKTKV~~V~~AGES~~T~~EAL~~I~~NALSKLNAEDPLK~~F~~LIDNVVGNIRGVCLFAG~~C~~NN~~V~~KV~~P~~QD~~N~~FTTIARLLKQ~~N~~V~~L~~V  
Mt: AKTAIMAIEAFK~~R~~ESNR~~E~~VYIPQIKNRV~~V~~AGS~~L~~EAL~~T~~KL~~L~~ATQNAQNP~~I~~RV~~N~~QAILD~~G~~E~~L~~AGVALIC~~C~~NN~~L~~K~~G~~FQD~~N~~SHLTVMKELLK~~N~~V~~V~~  
Rr: AKTIIIRMAIAAFGRD--PNRV~~A~~IPAFK~~Q~~SIV~~G~~ES~~A~~EAV~~V~~AALAKVNAD~~D~~PLK~~F~~LVDNVVNGNIQ~~G~~IVL~~F~~V~~G~~NT~~T~~KVQ~~D~~SAYVDLAKSLAKRN~~V~~L~~V~~

\* 520 \* 540 \* 560 \* 580 \* 600  
Cp: ETGCAATASAKRGLLLPETA-QLAGSGLASVCR~~T~~IG-----IP~~P~~V~~L~~H~~V~~SG~~V~~VD~~T~~SRILVMAAIAKELG~~V~~DIAD~~I~~PIAGAA~~F~~EW~~M~~SEKAVS~~I~~GA~~Y~~V  
Ct: ATGCAACALMRGCFMDPANV~~G~~ELCGEGLKAVLTAIGEANGLGGP~~L~~PPV~~L~~H~~V~~SG~~V~~VD~~N~~SRVALAVAVADRLG~~V~~DTDQL~~P~~VVASAAEAVA~~E~~KAVS~~I~~CT~~Y~~AV  
Cy: ASGCCAALMRGCFMDPSRTKEVCGEGLKAVLTAIGEANGLGEP~~L~~PPV~~L~~H~~V~~SG~~V~~VD~~T~~SRVALATALGNRLG~~V~~DI~~D~~Q~~L~~PPVVASAFEAMA~~E~~KAV~~A~~IG~~T~~WAV  
Ch: ATGCCAALMRGCFMDPANV~~E~~LCGDEGLKAVLTAIGEANGLGGP~~L~~PPV~~L~~H~~V~~SG~~V~~VD~~N~~SRVALV~~A~~ALANRLG~~V~~DLDR~~L~~PPVVASAAEAMH~~R~~KAV~~A~~IG~~T~~WAV  
Mt: ATGCCAAGKIGLLDANVET~~Y~~CGDGLKGF~~L~~KR~~I~~EGANIEIGLPPV~~F~~H~~V~~SG~~V~~VD~~N~~SRVADLLMAMANDL~~G~~VDTPK~~V~~PFV~~S~~APEAM~~S~~CKAAAI~~G~~TW~~V~~  
Rr: ATGCAACAFAKRGLMTSEATTQYAGEGLKGVLSAIGTAAGLGGP~~L~~PPV~~L~~H~~V~~SG~~V~~VD~~N~~SRVALATALANKL~~G~~V~~D~~LS~~D~~L~~P~~V~~S~~APECMSEKALAI~~G~~SWAV

\* 620 \* 640 \* 660 \*  
Cp: ASGIFV~~L~~IG~~T~~VE~~P~~V~~L~~GS~~K~~TVTEIL~~T~~QKAKYLVGGYFAVE~~D~~PFKAAELIINHIDEKRAALGI-----  
Ct: ALGLP~~T~~H~~V~~GV~~M~~PPV~~L~~GG~~P~~L~~V~~TKV~~L~~T~~D~~KVKELTGGYFIV~~D~~DPESA~~E~~AKLLAAIDERRAALGLSV~~P~~GGRR-----  
Cy: AIGIP~~T~~H~~V~~GV~~P~~PPV~~L~~GV~~L~~TRV~~L~~T~~D~~RVKELTGGYFIVE~~D~~PEAA~~A~~QKLLTVIDERRAALGLSV~~P~~GGRR-----  
Ch: TIGL~~P~~H~~V~~IG~~V~~L~~P~~IT~~G~~SLPVTQILTSSVKDITGGYFIVE~~D~~DPETA~~A~~DKLLA~~I~~INERRAGLGL~~P~~W-----  
Mt: SIGV~~P~~H~~V~~GT~~M~~PEV~~G~~SDLIYSI~~L~~TQIASDVYGGYFIFEM~~D~~PPV~~A~~ARKILDAL~~E~~YRTW~~K~~LGV~~H~~VEA~~R~~YETKLCQY  
Rr: TIGL~~P~~H~~V~~GS~~V~~PEV~~I~~GSQIV~~T~~KL~~V~~TE~~T~~AKDLVGGYFIV~~D~~TPKSA~~G~~DKLYAAIQERRAGLGL-----