

PtPCBER MADK---SKILLIGGTGYICKFIVEASAKAGHPTFALVRES--T 39  
MsIFR MATE---NKILLICPTGAIQRHIVWASIKACNPTYALVRKTPGN 41  
TpPLR MDK---SRVLIVGGTGYICKRIVNASISLGHPTYVILFRFE--V 39  
ObEGS1 MEENGMKSKILLIFGGTGYICNHMVKGSISLKLGHPTYVFTFRP---- 40  
PhIGS1 MTTG--KCKILLICATGYILGKYMVKASISLGHPTYAYVWML--K 40

PtPCBER VSDP-----VKRELVEKFKNLGVTLIHGDVDCGHDNLVKAI 74  
MsIFR VNKPKLITAAANPETKEELIDNYQSLGVILLECDINDHETLVKAI 85  
TpPLR VSNID-----KVQMLLYFKQLGAKLIEASLDDHQRLVDAL 74  
ObEGS1 -NS-----SKITLLDEFQSLGALIVKGLDEBEHEKLVLELM 73  
PhIGS1 KNSDD-----SKLQLLKEFESLGVTFIFYCELSEHDKLVAVF 76

PtPCBER KQVDVVISAIIG---SMQIADQTKIIAAIKEACNVKRFPPSEFC 114  
MsIFR KQVDIVICAAAG---RLLIEDQVKIKAIKEAGNVKRFPPSEFC 135  
TpPLR KQVDVVISALAGGVLSHHILEQLKLVIAIKEAGNIKRFPPSEFC 118  
ObEGS1 KKVDVVISALA---FFQILDQPKILEAIKIVAGNIKRFPPSDFC 113  
PhIGS1 KEVDIVISITLA---VPQVLEQLKVIIEAIKEAGNIKRFVPESEFC 116

PtPCBER MDVDHVN-AVEPAKTAFAKQAQIRRAIEAAGIPYTYVPSNFFAA 157  
MsIFR LDVDRHE-AVEPVRQVFEERASIRRVIEAECVPYTYLCCHAFTG 168  
TpPLR MDPDLMEHALQPGSITEIDKRKVRRAIEAASIPYTYVSSNMFAG 162  
ObEGS1 VEEDRIN-ALPPEALIERKRMIRRAIEEANIPIYTYVSNANCFAS 156  
PhIGS1 NEVDRVR-ALPRFQAVLDNKKKIRRAIEAAGIPFTFVVSANSLTA 159

PtPCBER YYLPTLAQFG-LTAPPRDKITILGDGNAKLVNKEDDIGTYTIK 200  
MsIFR YFLRNLAQLD-TDPPRDKVVILGDGNVKGAYVTEADVGTFTIR 211  
TpPLR YFAGSLAQLDGHMMPPRDKVLIYGDGNVKGIVWDEDDVGTYTIK 206  
ObEGS1 YFINYLRLPY---DPKDEIVYGTGEAKFAMNYEQDIGLYTIK 196  
PhIGS1 YFVDYLLHPR---QKSEQVTIYGSQDAKAVLNVEEDVAAAYTIK 199

PtPCBER AVDDARTLNKTVLIKPPKNITYSFNELIDLWEKKIGKTLKTFV 244  
MsIFR AANDPNTLNKAVHIRLPENYLTONEVIALWEKKIGKTLKTYVS 255  
TpPLR SIDDPQTLNKTMYIRPPMNLISQKEVIQIWERLSEQNLDKIYIS 250  
ObEGS1 VATDPRALNRVVIYRPSSTNIIITQLELSRWEKKIGKFKKIHVP 240  
PhIGS1 AADDPRAANRVLIKPPKNIVSQLLDVSSWEKTTCSLLKMTHTS 243

PtPCBER EEKLLKDIQESPIPIINIVLSINHSALVNGDMTNFETDPSWGLEA 288  
MsIFR EEQVLKDIQESSFPENYLLALYHSQQIKGDAV-YEIDPAKDIEA 298  
TpPLR SQDFLKDMLKDKSYEERIVRCHLYQIFFRGLYNFETLGPN-AIEA 293  
ObEGS1 EEEIVALTKELPEPENIPIALLHCLFIDGATMSYDFKEN-DVEA 283  
PhIGS1 EQEIIKLSSEINFENIHASILHNIFITACAQLSFELTQDHDLEA 287

PtPCBER SELYPDVKYTTVEEYLDQFV----- 308  
MsIFR SEAKYDVIVYTTADEYLNQEV----- 318  
TpPLR TKLYPEVKYVITMDSYLERV----- 313  
ObEGS1 STLYPELKEFTTIDELLDIFVHDP PPPASAAF----- 314  
PhIGS1 SELYFNYNVTSVDEYLIKICLVNPPKPKLATYAQPST 323