Large Rearrangements

**## PDB1: 1pho\_A**

**## PDB2: 5ldv\_A**

**## row number: 32**

**1pho\_A 000 DGNKLDVYGKVKAMHYMSDNA-S--------KDGDQSYIRFGFKGETQINDQLTGYGRWEAEFAGNKA-----ESDTAQQKTRLAFAGLKYK-DLGSFDY 085**

**5ldv\_A 000 AIKDVDVSGVLRYRYDTGNFDKNFLNNSNLNNSKQDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVATSVIA 100**

**1pho\_A 086 GRNLGALYDVEAWTD-M-FPEF----G-GDSSAQTDNFM--TKRASGLATY----------------RNTDFFGVIDGLNLTLQYQGK--NENRD----- 153**

**5ldv\_A 101 GKQQLNIIWTDNGVDGLVGTGVKVVNNSIDGLTLAAFAVDSFMAAEQGSDLLGQSTYVGNGKNNNDSFKLDSIG--NLYGAAAVGSYDLAGGQFNPQLWL 198**

**1pho\_A 154 -VKKQNGDGFGTSLTYDFG---GSDFAISGAYTNSDRTNEQNLQSRGTGKRAEAWATGLKYDANNIYLATFYSETRKM-----------T------PI-- 230**

**5ldv\_A 199 AYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELD--DKKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAGEE 296**

**1pho\_A 231 -T-------GGFANKTQNFEAVAQYQFDFGLRPSLGYVLSKGKDIEG-IGDEDLVNYIDVGATYYFNKNMSAFVDYKINQLDSDNK-LNINNDDIVAVGM 320**

**5ldv\_A 297 IFYTTGSRLNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVRLQA 396**

**1pho\_A 321 TYQF 324**

**5ldv\_A 397 LYKF 400**

**## PDB1: 2por\_A**

**## PDB2: 5ldv\_A**

**## row number: 84**

**2por\_A 000 VKLSGDARMGVMYNGDDW-----------NFSSRSRVLFTMSGTTDSGLEFGASFKAHESV------------GAETGEDGTVFLSG--AFGKIEMGDAL 075**

**5ldv\_A 000 VDVSGVLRYRYDTGNFDKNFLNNSNLNNSKQDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVATSVIAGKQQ 100**

**2por\_A 076 GASEALFG--D-L-YE---VGYTDL---DDRGGNDIPYLTGDE-RLTAEDNP--------VLLYTY-SAGA-FSVAASMSDG--KVG-E------TSEDD 145**

**5ldv\_A 101 LNIIWTDNGVDGLVGTGVKVVNNSIDGLTLAAFAVDSFMAAEQGSDLLGQSTYVGNGKNNNDSFKLDSIGNLYGAAAVGSYDLAGGQFNPQLWLAYWDQV 200**

**2por\_A 146 AQEMAVAAAYTFG---N--YTVGLGYEKIDSPDT----ALMADMEQLELAAIAKFGATNVKAYYADGELDRD--------FARA---VF--DL--TP-VA 220**

**5ldv\_A 201 AFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDDKKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAGEEIFYTTGSR 300**

**2por\_A 221 AAATAVDHKAYGLSVDSTFG-ATTVGGYVQVLDIDT-------IDDVTYYGLGASYDLGGGASIVGGIADNDLP--------NSDMVADLGVKFKF 300**

**5ldv\_A 301 LNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVRLQALYKF 396**

**## PDB1: 2zfg\_A**

**## PDB2: 5ldv\_A**

**## row number: 112**

**2zfg\_A 000 DGNKVDLYGKA-VGLHYFSKGNGENS---YGGNGDMTYARLGFKGETQINSDLTGYGQWEYNFQGNNSE---GADAQTGNKTRLAFAGLKYA-DVGSFDY 092**

**5ldv\_A 000 AIKDVDVSGVLRYRYDTGNFDKNFLNNSNLNNSKQDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVATSVIA 100**

**2zfg\_A 093 GRNYGVVYDALG-YT-DMLPEFGGDTA-YSD-----DFF--VGRVGGVAT----------------YRNSNFFGLVDGLNFAVQYLGK--NERDT----- 159**

**5ldv\_A 101 GKQQLNIIWTDNGVDGLVGTGVKVVNNSIDGLTLAAFAVDSFMAAEQGSDLLGQSTYVGNGKNNNDSFKLDSIG--NLYGAAAVGSYDLAGGQFNPQLWL 198**

**2zfg\_A 160 -ARRSNGDGVGGSISYEYE-----GFGIVGAYGAADRTNLQEAQPLGNGKKAEQWATGLKYDANNIYLAANYGETRNA-----------TPI--TNKFT- 239**

**5ldv\_A 199 AYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDD--KKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAGEE 296**

**2zfg\_A 240 ----N---TSGFANKTQDVLLVAQYQFDFGLRPSIAYTKSKAKDVEG-IGDVDLVNYFEVGATYYFNKNMSTYVDYIINQIDSDNK-LGVGSDDTVAVGI 330**

**5ldv\_A 297 IFYTTGSRLNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVRLQA 396**

**2zfg\_A 331 VYQF 334**

**5ldv\_A 397 LYKF 400**

**## PDB1: 3nsg\_A**

**## PDB2: 5ldv\_A**

**## row number: 139**

**3nsg\_A 000 NKDGNKLDLYGKAVGRHVWTTTGDSK--------NADQTYAQIGFKGETQINTDLTGFGQWEYRTKADRAE----GEQQNSNLVRLAFAGLKY--AEVGS 086**

**5ldv\_A 000 EEAIKDVDVSGVLRYRYDTGNFDKNFLNNSNLNNSKQDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVAT-S 099**

**3nsg\_A 087 IDYGRNYGIVYDVESYTDMAPYFSGET-----WGGA-----YTDNYMTSRAGG-------------------LLTYRNSDFFGLVDGLSFGIQYQGKN-- 155**

**5ldv\_A 100 VIAGKQQLNIIWTDNGVDG-LVGTGVKVVNNSIDGLTLAAFAVDSF-MAAEQGSDLLGQSTYVGNGKNNNDSFKLDSIGNL------YGAAAVGSYDLAG 191**

**3nsg\_A 156 QDNHS-----INSQNGDGVGYTMAYEFD-----GFGVTAAYSNSKRTNDQQDRDGNGDRAESRAVGAKYDANNVYLAAVYAETRNMS--------IVENT 237**

**5ldv\_A 192 GQFNPQLWLAYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDD-KKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIEDQGNL 290**

**3nsg\_A 238 ----V------TD---TVEMANKTQNLEVVAQYQFDFGLRPAISYVQSKGKQLNGAGGSADLAKYIQAGATYYFNKNMNVWVDYRFNLLDENDYSSSYVG 324**

**5ldv\_A 291 GSLLAGEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNT-NESA 389**

**3nsg\_A 325 TDDQAAVGITYQF 337**

**5ldv\_A 390 DHSTVRLQALYKF 402**

**## PDB1: 4d65\_A**

**## PDB2: 5ldv\_A**

**## row number: 187**

**4d65\_A 000 GNKLDVYGQIDVRHYFADAKSGE--------DGDDSRVRLGFKGDTQITDQLIGFGRFEWETSTNKA------ETSNDNQNRLAYAGLKFA-DYGSLDYG 085**

**5ldv\_A 000 IKDVDVSGVLRYRYDTGNFDKNFLNNSNLNNSKQDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVATSVIAG 100**

**4d65\_A 086 RNYGVIYDTNAWTDVLPLWGADT-----M-DQ-ED--TF--MMGRNRN-L--L------------TYRNNNGFGYIDG-LSFALQYQGKN--GDQNKSTG 156**

**5ldv\_A 101 KQQLNIIWTDNGVDG-LVGTGVKVVNNSIDGLTLAAFAVDSFMAAEQGSDLLGQSTYVGNGKNNNDSFKLDS---IGNLYGAAAVGSYDLAGGQFNPQLW 196**

**4d65\_A 157 SSALDNNGDGYGFSTAYELG----WGLSIGGGYSNSSRTPSQNNIKTGATGKRAEAWNVGSKLELDELYLAAMYGQTLNT-----------TRF---GDD 238**

**5ldv\_A 197 LAYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDD---KKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAG 293**

**4d65\_A 239 ------D---AEAIANKTENLELVALYSFDFGLTPSIGYNQSKGKNLGN-YGNKDLVKYIAVGASYDFNKNMAAVIDYKINLLKDNQFTDDYGINTDNVL 328**

**5ldv\_A 294 EEIFYTTGSRLNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVN--TNESADHSTV 391**

**4d65\_A 329 GLGLIYQF 336**

**5ldv\_A 392 RLQALYKF 399**

**## PDB1: 5fvn\_A**

**## PDB2: 5ldv\_A**

**## row number: 241**

**5fvn\_A 000 NKDGNKLDLYGKVDGLHYFSDDDSQ---------DGDQTYMRLGFKGETQVNDQLTGYGQWEYQIQGNSG-----E-NENNSWTRVAFAGLKF--GDAGS 083**

**5ldv\_A 000 EEAIKDVDVSGVLRYRYDTGNFDKNFLNNSNLNNSKQDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVAT-S 099**

**5fvn\_A 084 FDYGRNYGVVYDVTSWTD--VLPEFG---GDTYGS--D-NF---MQQRGN-G--FA------------TYRNSDFFGLVDG-LNFAVQYQGKNGSASGED 156**

**5ldv\_A 100 VIAGKQQLNIIWTDNGVDGLVGTGVKVVNNSIDGLTLAAFAVDSFMAAEQGSDLLGQSTYVGNGKNNNDSFKLDSI---GNLYGAAAVGSYDLAGGQFNP 196**

**5fvn\_A 157 QTNNGRTELRQNGDGVGGSITYNLG--E--GFGIGTAVSSSKRTSSQNDLTYGNGDRAETYTGGLKYDANNIYLAAQYTQTYNA-----------TRV-- 239**

**5ldv\_A 197 QLW--LAYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDD--KKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGS 292**

**5fvn\_A 240 --G------N-----LGWANKAQNFEVVAQYQFDFGLRPSVAYLQSKGKDLENGYGDQDLLKYVDVGATYYFNKNMSTYVDYKINLLDDKEFTRNAGIST 326**

**5ldv\_A 293 LLAGEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNT--NESAD 390**

**5fvn\_A 327 DDIVALGLVYQF 338**

**5ldv\_A 391 HSTVRLQALYKF 402**

**## PDB1: 5ldv\_A**

**## PDB2: 5nxr\_A**

**## row number: 242**

**5ldv\_A 000 EAIKDVDVSGVLRYRYDTGNFDKNFLNNSNLNNSKQDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVATSVI 100**

**5nxr\_A 000 KDGNKLDVYGKVDVRHYFASADKGKKS-----EDGDDSRVRLGVKGDTQITDQLTGFGRFEWETKTNKA------ENEGENKNRLAYAGLKFA-DFGSID 088**

**5ldv\_A 101 AGKQQLNIIWTDNGVDGLVGTGVKVVNNSIDGLTLAAFAVDS-FMAAEQGSDLLGQSTYVGNGKNNNDSFKLDS---IGNLYGAAAVGSYDLAGGQFNPQ 196**

**5nxr\_A 089 YGRNYGVVYDTNAWTD--VFPLW---GADTMA------QTDNFMTSRNRN-L--L------------TYRNNNAFGYVDG-LSFALQYQGKNGDNNKSSA 161**

**5ldv\_A 197 LWLAYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDD-----------KKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIED 285**

**5nxr\_A 162 ---GMAKDNGDGYGFSTAYELGW----GVTLGGGYSSSSRTPNQKAGVVTSEGDSYYSATGKRAQAWNVGGKFDANNVYLAAMYGQTQNT---------- 244**

**5ldv\_A 286 QGNLGSLLAGEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNT- 384**

**5nxr\_A 245 -SRY----GD----------LDLIANKTENVELVAQYLFDFGLKPSIGYNQSKGKNLGNGYDNQDLVKYISVGSYYYFNKNMSAVVDYKINLLKDNDFTK 329**

**5ldv\_A 385 -NESADHSTVRLQALYKF 401**

**5nxr\_A 330 EYGINTDNVLGLGLVYQF 347**

Loop-hairpins

**## PDB1: 2fgr\_A**

**## PDB2: 4frx\_A**

**## row number: 45**

**2fgr\_A 000 VGRYIGGYVAYDNGPLSASLGLAQQKTAVGGLATDRDEITLGASYNFGVAKLSGLLQQTKFKRDIGGDIKTNSYMLGASAPVG----GVGEVKLQYALYD 096**

**4frx\_A 000 DNRAFSGLFTYTVSGHSIGAGYQILNGDSD-----FPFLNRGDG-EGSTAYLITDVQIGKF-----QRAGERTWQVRYGYDFATVGVPGLTFNTIYLSGD 089**

**2fgr\_A 097 QKA---IDSKAHQITLGYVHNLS----KRTALYGNLAFLKNKD 132**

**4frx\_A 090 KIKTARGDQSEWERDISLAYVIPDGTFKGLGFTWKNASFRSGL 132**

**## PDB1: 2fgr\_A**

**## PDB2: 5dl5\_A**

**## row number: 52**

**2fgr\_A 000 VGRYIGGYVAYDNGPLSASLGLAQQKTAVGGLATDRDEITLGASYNFGVAKLS-GLLQQTKFKRDIGGDIKTNSYMLGASAPVG-----GVGEVKLQYAL 094**

**5dl5\_A 000 TNNIWAISGTYATGPHSVMLAYQQNTGNVG-----Y-DYGQ-NA--DGFQSIYLPNSYMSDF-----IGNHEKSAQIQYNVDFGKLGVLPGLNWTTAFVY 086**

**2fgr\_A 095 YDQ-KA----IDSKAHQITLGYVHNLS----KRTALYGNLAFLKNKD 132**

**5dl5\_A 087 GWDIKVRNVTDDAQEREFFNQVKYTVQSGFAKDASLRIRNSYYRASD 133**

**## PDB1: 4aui\_A**

**## PDB2: 5ldv\_A**

**## row number: 175**

**4aui\_A 000 AMADVTLYGTIKAGVETSRSVAHHGAQADRVKTATEIADLGSKIGFKGQEDLGNGLKAIWQLEQKAYVSG--------TDTGWGNRQSFIGLKG--GFGK 090**

**5ldv\_A 000 AIKDVDVSGVLRYRYDTGNFDKNFL-NNSNLNNSK--QDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVATS 097**

**4aui\_A 091 VRVGRLNN--ILKDT----GNFNP-------WEGKSYY-SGLSNIAQ--PEE----------------------R-HVS----VRYDSP-EFAGFSGSVQ 146**

**5ldv\_A 098 VIAGKQQLNIIWTDNGVDGLVGTGVKVVNNSIDGLTLAAFAVDSFMAAEQGSDLLGQSTYVGNGKNNNDSFKLDSIGNLYGAAAVGSYDLAGGQFNPQLW 197**

**4aui\_A 147 YVPNDNSGKNRSESYHAGFNYKND---GFFVQYAGSYKRHNYT--------TEKHQVHRLVGGYDHDALYASVAVQQQDAKL--------T-WRD----D 222**

**5ldv\_A 198 LAYWD----QVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDDKKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLA 293**

**4aui\_A 223 N-------------SHNSQTEVATTVAYRFG-NVTPRVSYAHGFKGSVYD-ADHDNTYDQVVVGAEYDFSKRTSALVSAGWLQKGKGAE---KFVATVGG 304**

**5ldv\_A 294 GEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVR 393**

**4aui\_A 305 VGLRHKF 311**

**5ldv\_A 394 LQALYKF 400**

**## PDB1: 4fso\_A**

**## PDB2: 6ehb\_A**

**## row number: 206**

**4fso\_A 000 DNRALSLLLAYAQG--GHTLSAGWQRMNGASSM----PYLDGSNPYLANYLQVNDF-ANPEERSWQLRYDFDLRSVGVPGLSFMTRYVNGDHIRLANGDE 093**

**6ehb\_A 000 GEDGYSLSAIYTFGDTGFNVGAGYADQDDQNEYMLAASYRMEN-LYFAGLFTDGELAKDVDYTGYELAAGYKLG----Q-AAFTATYNNAETAK-----K 089**

**4fso\_A 094 GKEWERDIELKYIVQSGRFKDLSLRLRNATYRTDFER--SARDVDEVRLIASYNL 146**

**6ehb\_A 090 TSADNFAIDATYYFK----PNFRSYISYQFNLLDSDKASKVASEDELAIGLRYDF 140**

**## PDB1: 4fsp\_A**

**## PDB2: 6ehb\_A**

**## row number: 212**

**4fsp\_A 000 DNRSFSGSLTYRLRN--GQAFGLGYQRMSGDHGF----PYLEGTDPYLVNF-GQYNDF-AEAGESSWQLRYDCDFAPLGVPGLSLMTRYFSGHGAKPKGA 092**

**6ehb\_A 000 GEDGYSLSAIYTF-GDTGFNVGAGYADQDDQNEYMLAASYRME--NLYFAGLFTDGELAKDVDYTGYELAAGYKLGQ-----AAFTATYNNAETAK---- 088**

**4fsp\_A 093 DGSREWERDSDLRYVLQGGALKGLGLVWRNATYRSAF-----SRDIDENRLYLTYEL 144**

**6ehb\_A 089 -KTSADNFAIDATYYFK----PNFRSYISYQFNLLDSDKASKVASEDELAIGLRYDF 140**

**## PDB1: 5dl6\_A**

**## PDB2: 6ehb\_A**

**## row number: 226**

**5dl6\_A 000 DNDLYHAHFELKHQ--NHKFIFGTFQHHGDTAF----PYLTGGETGLLIDTWP-GEF-LNPKEKAYSFRYEYDFKEYVPGLCFMTRYTTGHNIYAPNLGG 092**

**6ehb\_A 000 GEDGYSLSAIYTFGDTGFNVGAGYADQDDQNEYMLAASYRMENLY-F-AGLFTDGELAKDVDYTGYELAAGYKLG---Q-AAFTATYNNAETA------- 087**

**5dl6\_A 093 TNLKERETDFDLGYTVQSGWLKNLGLRARYAIYDNNMLSTANIKPVNETRINIDYTW 149**

**6ehb\_A 088 KKTSADNFAIDATYYFK----PNFRSYISYQFNLLDSDKASKVASEDELAIGLRYDF 140**

**## PDB1: 5ldv\_A**

**## PDB2: 6ehd\_A**

**## row number: 244**

**5ldv\_A 000 EEAIKDVDVSGVLRYRYDTGNFDKNFLNNSNLNNSKQDHKYRAQVNFSAAIADNFKAFVQFDYNAVDGGTGVDNATNAEKGLFVRQLYLTYTNEDVATSV 100**

**6ehd\_A 000 KSDAGTVDFYGQLRTELKFLEDKDP---------TIGSGSSRAGVDANYTVNDSLALQGKVEFALKDS-----------GDMYVRNHILGVKT--NFGKF 078**

**5ldv\_A 101 IAGKQQLNIIWTDNGVDGLVGTGVKVVNNSIDGLTLAAFAVDSFMAAEQGSDLLGQSTYVGNGKNNNDSFKLDSIGNLYGAAAVGSYDLAGGQFNPQLWL 200**

**6ehd\_A 079 SFGKQWTT--SDDV--Y-G-AD---YSY-FFGGTGLR--Y-G---TLSDA-----------------------LHDSQ----VKYVY--EADSFWVKAGY 133**

**5ldv\_A 201 AYWDQ--VAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELD--------DKKTYANGNLFALKGSIEVNGWDASLGGLYYGDKEKASTVVIEDQGNL 290**

**6ehd\_A 134 GFPEDNAKQELAELYVGATF--G-DLAVHAGGGQNRDKAFKVGSNTVGTTTTDIKADVTNSYFEVTGEYTIGDALIGVTYYNAELD-----------V-- 217**

**5ldv\_A 291 GSLLAGEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNETVRVGADFVYGGTKTEATTHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNT----- 385**

**6ehd\_A 218 ----EN-----------NPLVIDEDAISVAGTYKVADKTKLYAGYEYVMQEANT---GADEDGTLVYLGVEYKFASWARVYAEYGYGDGTTLGYTNKGSD 299**

**5ldv\_A 386 -----NESADHSTVRLQALYKF 402**

**6ehd\_A 300 AEVKATKVDSANNFGIGARYYW 321**

Loop-hairpins with alts

**## PDB1: 2y0l\_A**

**## PDB2: 6ehb\_A**

**## row number: 94**

**2y0l\_A 000 DHFDLGGLDYKLTD-QLTASYHYSNLQDVYRQHFVGLLHSWPIGPGELTSDLRFARSTDSGSAKAGGIDNKSLNGMFTYSLGNHAFGAAWQRMNGDDAFP 099**

**6ehb\_A 000 EDGYSLSAIYTFGDTGFNVGAGYADQDD-QNEYMLAASYRME----NLYFAGLFTDGELAK-----DVDYTGYELAAGYKLGQAAFTATYNNAETAK--- 087**

**2y0l\_A 100 YLEGSNPYLVNFVQVNDFAGPKERSWQLRYDYDFVGLGIPGLTFMTRYVKGDNV 153**

**6ehb\_A 088 -------------------KTSADNFAIDATYYFK----PNFRSYISYQFNLLD 118**

**## PDB1: 2y0l\_A**

**## PDB2: 6ehb\_A**

**## row number: 95**

**2y0l\_A 000 DNKSLNGMFTYSLG--NHAFGAAWQRMNGDDAF----PYLEGSNPYLVNFV-QVNDF-AGPKERSWQLRYDYDFVGLGIPGLTFMTRYVKGDNVELAGQS 092**

**6ehb\_A 000 GEDGYSLSAIYTFGDTGFNVGAGYADQDDQNEYMLAASYRME--NLYFAGLFTDGELAKDVDYTGYELAAGYKLG----Q-AAFTATYNNAETAK----- 088**

**2y0l\_A 093 GEGREWERNTELQYVFQSGALKNLGIRWRNATFRSNF-----TRDIDENRLIVSYTL 144**

**6ehb\_A 089 -KTSADNFAIDATYYFK----PNFRSYISYQFNLLDSDKASKVASEDELAIGLRYDF 140**

**## PDB1: 3szv\_A**

**## PDB2: 6ehb\_A**

**## row number: 156**

**3szv\_A 000 DNRAFGALFSLRLG--AHAVAAGYQRISGDDPYP----YIAGSDPYLVNF-IQIGDF-GNVDERSWQLRYDYDFGALGLPGLSFMSRYVSGDNVARGAAN 092**

**6ehb\_A 000 GEDGYSLSAIYTFGDTGFNVGAGYADQDDQNEYMLAASYRME--NLYFAGLFTDGELAKDVDYTGYELAAGYKLG----Q-AAFTATYNNAETAK----- 088**

**3szv\_A 093 DGKEWERNTDLGYVVQSGPLKNLGVKWRNATVRSNF-----ANDLDENRLILSYSL 143**

**6ehb\_A 089 KTSADNFAIDATYYFK----PNFRSYISYQFNLLDSDKASKVASEDELAIGLRYDF 140**

**## PDB1: 3szv\_A**

**## PDB2: 6ehb\_A**

**## row number: 157**

**3szv\_A 000 SDAFDFAGGDYRLTP-ALTASLHQGRLKDIYRQTFAGLVHTLDLGGQRSLKSDLRFARASEDGGFRELDNRAFGALFSLRLGAHAVAAGYQRISGDDPYP 099**

**6ehb\_A 000 GEDGYSLSAIYTFGDTGFNVGAGYADQDD-QNEYMLAASYRME-----NLYFAGLFTDGELAK---DVDYTGYELAAGYKLGQAAFTATYNNAETAK--- 088**

**3szv\_A 100 YIAGSDPYLVNFIQIGDFGNVDERSWQLRYDYDFGALGLPGLSFMSRYVSGDNVA 154**

**6ehb\_A 089 -------------------KTSADNFAIDATYYFK----PNFRSYISYQFNLLDS 120**

**## PDB1: 4frx\_A**

**## PDB2: 6ehb\_A**

**## row number: 199**

**4frx\_A 000 SNKFYYAGGDYKVNK-DLTLQYYYGNLDDFYKQHFLGLIHNWQIGPGVLKTDLRAFDSSSDGKNGSRSGRADGYVSSGYYGSGVTKGEVDNRAFSGLFTY 099**

**6ehb\_A 000 GEDGYSLSAIYTFGDTGFNVGAGYADQDD-QNEYMLAASYRM--E--NLYFAGLFTDGELA-------------------------KDVDYTGYELAAGY 070**

**4frx\_A 100 TVSGHSIGAGYQILNGDSDFPFLNRGDGEGSTAYLITDVQIGKFQRAGERTWQVRYGYDFATVGVPGLTFNTIYLSGDKIK 180**

**6ehb\_A 071 KLGQAAFTATYNNAETAK---------------------------KTSADNFAIDATYYFK----PNFRSYISYQFNLLDS 120**

**## PDB1: 4frx\_A**

**## PDB2: 6ehb\_A**

**## row number: 200**

**4frx\_A 000 VDNRAFSGLFTYTVS--GHSIGAGYQILNGDSDFPFLNRGDGEGSTAYLITDVQIGKF-QRAGERTWQVRYGYDFATVGVPGLTFNTIYLSGDKIKTARG 097**

**6ehb\_A 000 NGEDGYSLSAIYTFGDTGFNVGAGYADQDDQNEY-MLAASYRM-ENLYFAGLFTDGELAKDVDYTGYELAAGYKLGQ-----AAFTATYNNAETAK---- 089**

**4frx\_A 098 DQSEWERDISLAYVIPDGTFKGLGFTWKNASFRSGLPAAGSSNNQRDQDENRLIVSYTL 156**

**6ehb\_A 090 KTSADNFAIDATYYFK----PNFRSYISYQFNLLDSDKA---SKVASEDELAIGLRYDF 141**

**## PDB1: 5dl7\_A**

**## PDB2: 6ehb\_A**

**## row number: 230**

**5dl7\_A 000 DNRHISGLFGLNYQ--NHTVSLGYMQSFGSTGL----PFLSGTESPVVLD--FMSSDY-SNKDEKVYSIRYEYDFKNARIGDVSLNGLRFMTRYAKGEDI 091**

**6ehb\_A 000 GEDGYSLSAIYTFGDTGFNVGAGYADQDDQNEYMLAASYRME---NLYFAGLFTDGELAKDVDYTGYELAAGYKLGQ----------AAFTATYNNAETA 087**

**5dl7\_A 092 DLLQYGDQRFKEDSLEFDLGYKIPEGKLKGLGMRARFSHYRNDMPTNMTFHSANETRLNVDYTF 155**

**6ehb\_A 088 K-------KTSADNFAIDATYYFK----PNFRSYISYQFNLLDSDKASKVASEDELAIGLRYDF 140**

**## PDB1: 5dl7\_A**

**## PDB2: 6ehb\_A**

**## row number: 231**

**5dl7\_A 000 TDSFYTLGGSYQLK--DYRLRAYHAELKDIYQQQFLGFNGKQPLNDQLNFLSDVRFFNSEETGSKKIGEVDNRHISGLFGLNYQNHTVSLGYMQSFGSTG 098**

**6ehb\_A 000 GEDGYSLSAIYTFGDTGFNVGAGYADQDD-QNEYMLAASYRME-----NLYFAGLFTDGELAK-----DVDYTGYELAAGYKLGQAAFTATYNNAETAK- 088**

**5dl7\_A 099 LPFLSGTESPVVLDFMSSDYSNKDEKVYSIRYEYDFKNARIGDVSLNGLRFMTRYAKGEDID 160**

**6ehb\_A 089 ---------------------KTSADNFAIDATYYFKP---------NFRSYISYQFNLLDS 120**