

The test dataset contains 329 proteins, in which '1' represents disordered residue and '0' represents ordered residue.

```
=====  
>1ABAA  
MFKVYGYDSNIHKCGPCDNAKRLTLTVKKQPFEFINIMPEKGVFDDEKIAELLTKLGRDTQIGLTM  
PQVFAPDGSHIGGFDQLREYFK  
0000000000000000000000000000000000000000000000000000000000000000  
000000000000000000000000
```

```
>1AMMA  
GKITFYEDRGFQGHCHYECSSDCPNLQPYFSRCNSIRVDSGCWMLYERPNYQGHQYFLRRGDYDPDY  
QQWMGFNDSIRSCRLIPQHTGTFRMRIYERDDFRGQMSEITDDCPSLQDRFHLTEVHSLNVLEGS  
WVLYEMPSYRGRQYLLRPGEYRRYL DWGAMNAKVGSLRRVMDFY  
0000000000000000000000000000000000000000000000000000000000000000  
0000000000000000000000000000000000000000000000000000000000000000  
0000000000000000000000000000000000000000000000000000000000000000
```

```
>1C75A  
VDAEAVVQQKICISCHGGDLTGASAPAIKAGANYSEEEILDIIILNGQGGMPGGIAKGAEAEAVAA  
WLAEEK  
0000000000000000000000000000000000000000000000000000000000000000  
000000
```

```
>1FCXA  
SPQLEELITKVSKAHQETFPSTLCQLGKYTTNSSADHRVQLDLGLWDFSELTAKCIIKIVEFAKR  
LPGF TGLSIADQITLLKAACLDILMLRICTRYTPEQDTMTFS DGLTLNRTQMHNAGFGPLTDLVF  
AFAGQLLPLEMDTETGLLSAICLICGDRMDLEEPEKVDKQLQEP LLEALRLYARRRRRPSQPYMFP  
RMLMKITDLRGI STKAERAITLKMEIPGMPPLIREMLE  
0000000000000000000000000000000000000000000000000000000000000000  
0000000000000000000000000000000000000000000000000000000000000000  
0000000000000000000000000000000000000000000000000000000000000000  
0000000000000000000000000000000000000000000000000000000000000000
```

```
>1G66A  
SCPANHVF GARETTASPGYGSSSTVNVGVL SAYPGSTAEAINYPACGGQSSCGGASYSSSVAQGI  
AAVASAVNSFN SQPSTKIVLVGYSQGGEIMDVALCGGGDPNQGYTNTAVQLSSSAVN MVKAAIF  
MGDPMFRAGLSYEVGTCAAGGFDRPAGFSCPSAAKIKSYCDASDPYCCNGSNAATHQGYGSEYG  
SQALAFVKSKLG  
0000000000000000000000000000000000000000000000000000000000000000  
0000000000000000000000000000000000000000000000000000000000000000  
0000000000000000000000000000000000000000000000000000000000000000  
000000000000
```

```
>1HNJA  
MYTKIIGTGSYLPEQVRTNADLEKMVDTSDEWIVTRTGIRERHIAAPNETVSTMGFEATR A IEM  
AGIEKDQIGLIVATTSAATHAFPSAACQIQSMLGIKGC PAFDVAACAGFTYALS VADQYVKS GA  
VKYALVVGSDV LARTCDPTDRGTIIIFGDGAGAAVLAASEE PGIISTHLHADGSY GELLTLPNAD  
RVNPENSIHLTMAGNEVF K VAVTELAHIVDETLAANNLDRSQLDWLVP HQANLR IISATAK K LGM  
SMDNVVVT LDRHGNTSAASVPCALDEAVRDGRIKPGQLVLLLEAFGGGFTWGSALVRF
```


SLSDFSVASRDVNHNNICAGLSTEWLVMSSDGAESRMDHLDYNGEGQSRGSRHQVYNDALRAA
LSNDDEAPFFTASTAVIEDAGFSLRREPKTVHASGGSAQLGQTVAHQVQSGRKHLLSLRFANVQ
GHAIACSCEGSQFKLFDPNLGEFQSSRSAAPQLIKGLIDHYNSLNYDVACVNEFRVSV
00
00
00

>1UKUA

MIIVYTTFPDWESAEKVVKTLLKERLIACANLREHRAFYWWEKGKIEEDKEVGAAILKTREDLWEEL
KERIKELHPYDVPAAIIRIDVDDVNEDYLKWLIEETKK
00
00

>1V7RA

MKIFFITSNPGKVREVANFLGTGFGIEIVQLKHEYPEIQAEKLEDVVDFGISWLKKGKVPPEPFMIED
SGLFIESLKGFPVYSSYVYRTIGLEGILKLMEGAEDRRAYFKSVIGFYIDGKAYKFSGVTWGRI
SNEKRGTHGFGYDPIFIPIPEGSEKTFAEMTIEEKNALSHRGKALKAFFEWLKVNLKY
00
00
00

>1Y0MA

TFKSAVKALFDYKAQREDELTFKSAIQNVEKQDGGWWRGDYGGKKQLWFPSNYVEEMIN
00

>1ZLMA

GQVKVFRALYTFEPRTPEDELYFEEGDIYITDMSDTNWWKGTSKGRGTGLIPSNYVAEQ
00

>2A6ZA

GSDASKLSSDYSPLDLINTRKVPNNWQTGEQASLEEGRIVLTSNQNKGSLLWKQGFDLKDSFTM
EWTFRSVGYSGQTDGGISFWFVQDSNIPRDKQLYNGPVNYDGLQLLDNNGPLGPTLRGQLNDGQ
KPVDKTKIYDQSFASCLMGYQDSSVPSTIRVTYDLEDDNLLKVQVDNKVCFQTRKVRFPSPGSYRI
GVTAQNGAVNNAESFEIFKMQFFNGV
00
00
00
00

>2ERFA

GGDNSVFDIFELTGAARKGSGRRLVKGPDSPAPFRIEDANLIPPVPDDKFQDLVDAVRTEKGFLL
LLASLRQMKKTRGTLALERKDHSGQVFSVVSNGKAGTLDLSLTVQKQHVVSVEEALLATGQWK
SITLQVQEDRAQLYIDCEKMENAELDVPIQSVFTRDLASIALRIAKGGVNDNFQGVLQNVRFVF
GTPPEDILRNKGC
00
00
00
00

>2FDNA

AYVINEACISGACEPECPVNAISSGDDRYVIDADTCIDCGACAGVCPVDAPVQA

>5ONNA

MIVKHL EEIVDTKDDIDTTTWN SRLLLLTKDGMGFSLNDTLIKAGTETLIWYKNHVEAVYCIEGE
GEIEVVGGETYPITPGMMYALDGHEKH YLRARSQMRMVCVFNPLTGAEVHDEEGTYPLLAPITD
GSAWSHPQ

00
00
00000000

>5W3RA

GSHMDQPLSGYPWFHGM LSRLKAAQLVLTGGT GSHGVFLVRQSETRRGEYVLT FNFQ GKAKHLRL
SLNAAGQCRVQHLHFQSI FDMLEHFRVHPIPLESGGSSDVVLVSYVPSS

00
00

>5X2EA

DSFINIFV SIDKGTNVISYPELEQYVAENNL DPSMVEKWKQLFDPDNTGSITLETFC SKLGLKP
AEIIDFREQKGLHAA

00
0000000000000000

>5X2JA

MAFELPNLPYGFRALEPHIDQQTMEI HHDKHHNTYVTKLNAAVEGTDLESKSIEEIVANLDSVPE
NIQTAVRNNGGGHLNHS LFWELLTPNSEEKGT VVDKIKEQWGS LDAFKEEFANQAAARFGSGWAW
LVVNDGKLEIVTTPNQDNPLTEGKTPILGLDVWEHAYYLKYQNKRPDYISAFWNVWNWEKVDELY
NAAK

00
00
00
0000

>5X57A

YRPTTDADKIEDEVTRQVAQCKCAKRFQVEQIGENKYRFGDSQQ LRLVRILRSTVMVRVGGGWMA
LDEFVLKNDPCRARGR

00
0000000000000000

>5XH3A

NPYARGPNPTAASLEASAGPFTVRSFTVSRPSGYGAGTVYYPTNAGGTVGAI AIVPGYTARQSSI
KWWGPR LASHGFVVITIDT NSTLDQSSRSSQMAALGQV ASLNGTSSSPIYGVDTARMGVMGW
AMGGGSLISAANNPSL KAAAPQAPWDSSTNFSSVTVP TLI FACENDSIAPVNSSALPIYDSMSR
NAKQFLEINGGSHSCANS GNSNQALIGKKGVAWMKR FMDNDTRYSTFACENPNSTRVSDFRTANC
S

00
00
00
00
0

>5XMOA

ADFEVHMLNKGKDGAFVFE PASLKVAPGDTVTFIPKDKGHN VETIKGMIPDGAEAFKSKINENYK

000000000000000000000000

>1DT1A

DGAKIYAQCAGCHQONGQGI PGAFPLAGHVAEILAKEGGREYLILVLLYGLQGGQIEVKGMKYNG
VMSSFAQLKDEEIAAVLNHIATAWGD AKKVKGFKPF TAEVVKLR AKKLT PQQVLA ERKKLGLK
00
00

>1E1DA

MFCFCQJETAKNTGCTVKGMC GKPEETANLQDLLIFVLRGIAIYGEK LKELGQPDRSNDDFVLQG
LFATITNANWDDARFEAMISEGLARRDKLRNAFLAVYKAKNGKDFSEPLPEAATWTGDSTAF AEK
AKSVGILATENEDVRS LRELLI IGLKGVAAAYA EHA AVLGF RKTEIDEFMLEALASTTKDLSVDEM
VALVMKGRRMAVTTMALLDEANTTTYGNPEITQVNI GVGKNPGILISGHDLKDMAELLKQTEGTG
VDVYTHGEMLPANYYP AFKKYPHFVGN YGGSWWQONPEFESFN GPILLTTNCLVPLK KENTYLDR
LYTTGVVGYEGAKHIADRPAGGAKDFSALIAQA KKPVEIETGSIVGGFAHHQVLALADK VVE
AVKSGAIKRFVVMAGCDGRQKRSY TEVAENLPKDTVILTAGCAKYRYNKLNLGDIGGI PRVLD
AGQCND SYSLAVIALKLKEV FGLDDINDLPVSYDI AWYEQKAVAVLLALLFLGVK GIRLGP TPLPA
FLSPNVAKVLVENFNIKPIGTVQDDIAAMMAGK

00
00
00
00
00
00
00
00
00
00
00

>1EB3A

MHTAEFLETEPTEISSVLAGGYNHPLL RQWQSERQLTKNMLIFPLFISDNPDDFTEIDSLPNINR
IGVNR LKDY LKPLVAKGLRSVILFGVPLIPG TKDPVGT AADDPAGPVIQGIKFIREYFPELYIIC
DVCLCEY TSHGHCGLVYDDGT INRERSVSRLAAVAVNYAKAGAHCVAPS DMIDGRIRDIKRGLIN
ANLAHKTFVLSYAAKFSGNLYGPF RDAACSAPSNGDRKCYQLPPAGRGLARRALERMSEGADGI
IVK PSTFYLDIMRDASEICKDLP ICAYHVS GEYAMLHAAA EKGVDLKTIAFESHQGF L RAGARL
IITYLAPEFLDWLDE

00
00
00
00
00
00

>1EGQA

AAQT NAPWGLARISSTSPGTSTYYYDESAGQ GSCVYVIDTGIEASHPEFEGRAQMVKTYYYSSRD
GNHGHTHCAGTVGSRTYGVAKKTQLFGVKV LDDNGSGQYSTI IAGMDFV ASDKNRNC PKGVVAS
LSLGGGYSSSVNSAAARLQSSGVMVA VAAGNNNADARNY SPASEPSVCTVGASDRYDRRSSFSNY
GSVLDIFGPGT SILSTWIGGSTRSISG TSMATPHVAGLAA YLMTLGKTTAASACRYI ADTANKGD
LSNIPFGTVNLLAYNNYQA

MAE EWYFGKITRRESERLLLNPENPRGTFLVRESETTKGAYCLSVSDFDNAKGLNVKHYKIRKLD
SGGFYIWSRTQFSSLQQLVAYYSKHADGLCHRLTNVCPT
000
000

>1FEHA

MKTI IINGVQFNTDEDTTILKFARDNNIDISALCFLNNCNNDINKCEICTVEVEGTGLVTACDTL
IEDGMIINTNSDAVNEKIKSRISQLLDIHEFKCGPCNRRENCEFLKLVIKYKARASKPFLPKDKT
EYVDESKSLTVDRTKCLLCGRVCVNACGKNTETYAMKFLNKNKGTIIGAEDKCFDDTNCLLCGQ
CIIACPVAALSEKSHMDRVKNALNAPEKHVIVAMAPSVRASIGELFNMFGVDVTGKIYTALRQL
GFDKIFDINFGADMTIMEEATELVQRIENNGPFPMFTSCCPGWVRQAENYYPELLNNLSSAKSPQ
QIFGTASKTYYPISGLDPKNVFTVTVMPCTSKKFEADRPQMEKDGLRDI DAVITTRELAKMIKD
AKIPFAKLEDSEADPAMGEYSGAGAI FGATGGVMEAAALRSKDFAEAELEDIEYKQVRGLNGIK
EAEVEINNNKYNVAIVINGASNLFKFMKSGMINEKQYHFIEVMACHGGCVNGGGQPHVNPDKLEKV
DIKKVRASVLYNQDEHLSKRKSHENTALVKMYQNYFGKPGEGRAHEILHFYKK

000
000
000
000
000
000
000
000
000
000
000

>1FFRA

AAPGKPTIAWGNTKFAIVEVDQAATAYNNLVKVKNAADVSVSWNLWNGDTGTTAKVLLNGKEAWS
GPSTGSSGTANFKVNKGGRYQMQUALCNADGCTASDATEIVVADTDGSHLAPLKEP LLEKNKPYK
QNSGKVVGSYFVEWGVYGRNFTVDKI PAQNLTHLLYGFI PICGGNGINDSLKEIEGSFQALQRSC
QGREDFKVS IHDPFAALQKAQKGVTAWDDPYKGNFGQLMALKQAHPDLKILPSIGGWTLSDPFFF
MGDKVKRDRFVGSVKEFLQTWKF FDGVDI DWEFPGGKGANPNLGS PQDGETYVLLMKELRAMLDQ
LSVETGRKYELTS AISAGKDKIDKVAYNVAQNSMDHIFLMSFDYGAFDLKNLGHQ TALNAPAWK
PDTAYTTVNGVNALLAQGVKPGKIVVGTAMYGRGWTGVNGYQNNIPFTGTATGPVKGTWENGIVD
YRQIAGQFMSEWQYTYDATAEAPYVFKPSTGDLITFDDARSVQAKGKYVLDKQLGGLFSWEIDA
DNGDILNSMNASLGN SAGVQ

000
000
000
000
000
000
000
000
000
000

>1FMBA

VTYNLEKRPTTIVLINDTPLNVLLDTGADTSVLTTAHYNRLKYRGRKYQGTGIGGVGNVETFST

IKAAANMDLMRADMGAATICSAIVSAAKLDLPINIVGLAPLCENMPSPGKANKPGDVVRARNGKT
IQVDNTDAEGRILILADALCYAHTFNPVKI INAATLTGAMDIALGSGATGVFTNSSWLWNKLF EAS
IETGDRVWRMPLFEHYTRQVIDCQLADVNINIGKYRSAGACTAAAF LKEFVTHPKWAHLDIAGVMT
NKDEVFYLKGMAGRPTRTLIEFLFRFSQ

00
00
00
00
00
00
00
00
00

>1LIBA

CDAFVGTWKLVSSENFDDYMKVGVGFATR KVAGMAKPNMII SVNGDLVTIRSESTFKNTEISFK
LGVEFDEITADDRKVKSIITLDGGALVQVQKWDGKSTTIKRRDGDKLVVECV MKGVTSTRVYER
A

00
00
0

>1LJ5A

VHHPPSYVAHLASDFGVRV FQQVAQASKDRNVVFS PYGVASVLAMLQLTTGGETQQQIQ AAMGFK
IDDKGMAPALRHLYKELMGPWNKDEISTTDAIFVQRDLKLVQGFMPHFRLFRSTVKQVDFSEVE
RARFIINDWVKTHTKGMISNLLGKGAVDQLTRLVLVNALYFNGQWKTPFPDSSTHRRLFHKS DGS
TVSVPMAQTNKFNYTEFTTPDGHYDILELPYHGDTLSMFIAAPYEKEVPLSALTNILSAQLIS
HWKGNMTRLRLLVLPKFSLETEVDLRKPLENLGMTDMFRQFQADFTSLSDQEPLHVAQALQKVK
IEVNESGTVASSSTAVIVSARMAPEEIMDRPFLFVVRHNPTGTVLFMGQVMEP

00
00
00
00
00
00
00

>1M2HA

MDEKLLKTIAESKYLVALTGAGVAAESGIPTFRGKDGLWNRYP EELANPQAFKDP EKVKWYWA
WRMEKVFNAQPNKAHQAF AELERLGV LKCLITQNVDDLHERAGSRNVIHLHGSLRV RCTSCNNS
FEVESAPKIPPLPKCDKCGSLLRPGVVWFGEMLPDVLDRAMREVERADVIIVAGTSAVVQPAAS
LPLIVKQRGGAIIEINPDETPLTPIADYSLRGKAGEVMDELVRHVRKALS LKLN

00
00
00
00

>1MIXA

MKFFYS DQNVDSRDPVQLNLLYVQARDDI LNSHPVSFDKACEFAGYQCQIQFGPHNEQKHKPGF
LELKDFLPKEYIKQKGERKIFMAHKNCGMSEIEAKVRYVKLARS LKTYGVSFFLVKEKMKGKNK

TALPAFNVNPNNSVSVSGLASGGYMAAQLGVAYSDFVNVGFGVFAGGPYDCARNQYYTSCMYNGYP
SITTPATANMKSWSGNQIASVANLGQRKIYMWTGSSDTTVGPVNMNQLKAQLGNFDNSANVSYVTT
TGAVHTFPTDFNGAGDNSCSLSTSPYISNCNYDGAGAALKWIYGSLNARNTGTLSGSLVLSFAQSG
SYGANGMDTTGYLYVPQSCASGATVCSLHVALHGCLQSYSSIGSRFIQNTGYNKWADTNMIILY
PQAIIPDYTIHAIWNGGVLSPNGCWDWVGWYGSNADQIGGVQMAAIVGQVKQIVSGFQ
00
00
00
00
00

>2E7UA

MERPISEAYFQEAKRHIPGGVSSPVRAFKA VGGT PPF LVRGEGAYVWDADGNRYLDYVMSWGPLI
LGHAHPKVLARVRETLEGLTFGAPSPLEVALAKKVKRAYPFVDLVRVNSGTEATMSALRLARG
YTGRPYIVKFRGNYHGHADGLLVEAGSGALTLGVPSSAGVPEEYAKLTLVLEYNDPEGLREVLKR
RGEEDIAAII FEPVGNAGVLPTEDFLKALHEAKAYGVLLIADEVMTGFRLAFGGATELLGLKPD
LVTLGKILGGGLPAAAYAGRREIMEKVAPLGPVYQAGT LSGNPLAMAAGLATLELLEENPGYYAY
LEDLGARLEAGLKEVLKEKGLPHTVNRVGS MITVFFTEGFPVTFQDARRTDELFKRFFHGLLDR
GIYWPPSNFEAAFLSVAHREEDVEKTLEALRKAL

00
00
00
00
00
00
00

>2E7FA

MNDSEFHRLADQLWLTIEERLDDWDGSDIDCEINGGVLTITFENGSKII INRQEPLHQVWLATK
QGGYHFDLKGDEWICDRSGETFWDLLEQAATQQAGETVSFR

00
00

>2EHGA

MIIGYFDGLCEPKNPGGIATFGFVIYLDNRKIEGYGLAEKPF SINSTNNVAEYSGLICLMETMLR
LGISSPIIKGDSQLVIKQMNGEYKVKAKRIIPLYEKAIELKKLNATLIWVPREENKEADRLSRV
AYELVRRGKLRDIGCIILT

00
00
00

>2EVBA

MVVSENVVSAPMPGKVLRLVLRVVGDRVRVVGQGLLVLEAMKMENEIPSPRDGVVKRILVKEGEAVD
TGQPLIELG

00
0000000000

>2EWTA

MSSEYAKQLGAKLRAIRTQQGLSLHGVEEKSQGRWKAVVVGSYERGDRAVTVQRLAELADFYGVP

CSPEFWARSIGWYVMSLADMIEELPKKHPNRHVWKNLQDMIKSICRYQDKETGLWYQIVDKGDR
SDNWLESSGSCLYMYAIAKGINRGYLDLAYETTLLKAYQGLIQHKTETSEDGAFLVKDICVGTSA
GFYDYVSRERSTNDLHGAGAFILAMTELEPLFRSAGK

00
00
00
00
00
00

>2HZ1A

STLYEKLGGTTAVDLAVDKFYERVLQDDRIKHFFADVDMAKQRAHQKAFLLTYAFGGTDKYDGRYM
REAHKELVENHGLNGEHFDDAVAEDLLATLKEMGVPELDIAEVA AVAGAPAHKRDLVNLQ

00
00

>2I6MA

MYWVRRKTIGGSGLPYTENEILEWRKEGVKRVLVLPELWEIEESWGDYYSILKKNGLQPLHI
PIPDGGVPSDSQFLTIMKWLSEKEGNLVHCVGGIGRTGTILASYLILTEGLEVESAIDEVRLVR
PGAVQTYEQEMFLLRVEGMRKSWLKNIYSNS

00
00
00

>2I6VA

QEIQYVRLS QVKRDDKVLGYRVSPGKDPVLFESIGLQDGDMAVALNGLDLTDPNVMNTLQSMN
EMTEMSLTVERDGGQHDVYIQF

00
00

>2JGPA

RSEYVAPRSVWEARLAQVWEQVLNVPQVQVGDFFALGGHSLRAMRVLSSMHNEYQVDIPLRILF
EKPTIQELAAFIETAKGNVFSIEPVQKQAYYPVSSAQKRMYILDQFEGVGISYNMPSTMLIEGK
LERTRVEAAFQRLIARHESLRTSFAVNGEPVQNIHEDVPFALAYSEVTEEEARELVSSLVQFPD
LEVAPLIRVSLKIGEDRYVLFDTMHHSISDGVSSGILLAEWVQLYQGDVLPRLIQYKDFAVWQ
QEFSSQSAAFHKQEAYWLQTFADDIPVLNLPDFTTRPSTQSFAGDQCTIGAGKALTEGLHQLAQAT
GTTLYMVLLAAYNVLLAKYAGQEDIIVGTPITGRSHADLEPIVGMFVNTLAMRNKPPREKTFSEF
LQEVKQNALDAYGHQDYPFEELVEKLAIARDLSRNPLFDTVFTFQNSTEEVMTLPECTLAPFMTD
ETGQHAKFDLTFATEEREEMTIGVEYSTSLFTRETMERFSRHFLTIAASIVQNPHIRLGEIDML

00
00
00
00
00
00
00
00
00
00
00

>2JHYA

AMVPNVVVTGLTLVCSSAPGPLELDTGDLESFKKQSFVLKEGVEYRIKISFRVNREIVSGMKYI
QHTYRKGVKIDKTDYMGVSGYPRAEHYHFLTPVEEAPKGMLARGSYSIKSRFTDDDKTDHLSWEW
NLTIKKDW

00
00
00000000

>2LAOA

ALPQTVRIGTDTTYAPFSSKDAKGEFIGFDIDLGNEMCKRMQVKCTWVASDFDALIPSLKAKKID
AIISSLSITDKRQOEIAFSDKLYAADSRLIAAKGSPIQPTLESKKGKHVGVLOGSTQEAYANDNW
RTKGVVAVAYANQDLIYSDLTAGRLDAALQDEVAASEGFLKQPAGKEYAFAGPSVKDKKYFGDGT
GVGLRKDDTELKAAFDDKALTELQRDGTYDKMAKKYFDFNVYGD

00
00
00
00

>2MNRA

EVLITGLRTRAVNVPLAYPVHTAVGTVGTAPLVLIDLATSAGVVGHSYLFAYTPVALKSLKQLLD
DMAAMIVNEPLAPVSLEAMLAKRFCLAGYTGLIRMAAAGIDMAAWDALGKVHETPLVKLLGANAR
PVQAYDSHSLDGVKLATERAVTAAELGFRAVTKIGYPALDQDLAVVRSIRQAVGDDFGIMVDYN
QSLDVPAAIKRSQALQQEGVTWIEEPTLQHDYEGHQRIQSKLNVVQMGENWLGPEEMFKALSIG
ACRLAMPDAMKIGGVTGWIRASALAQQFGIPMSSHLFQEISAHLLAATPTAHWLERLDLAGSVIE
PTLTFEGGNAVIPDLPGVGI IWREKEIGKYL

00
00
00
00
00
00

>2NW6A

ADNYAATRYPIILVHGLTGTDKYAGVLEYWYGIQEDLQQRGATVYVANLSGFQSDDGPNRGEQL
LAYVKTVLAATGATKVNVLVGHSSQGLTSRYVAAPDLVASVTTIGTPHRGSEFADFVQGVLAYD
PTGLSSTVIAAFVNVFGILTSSSNNTNQDALAALKTLTTAQAATYNQNYPSAGLGAPGSCQTGAP
TETVGGNTHLLYSWAGTAIQPTISVFGVTGATDTSTIPLVDPANALDPSTLALFGTGTVMVNRGS
GQNDGVVSKCSALYQVLSTSYKWNHLDEINQLLGVRGANAEDPVAVIRTHANRLKLAGV

00
00
00
00
00

>2P99A

AISIKTPEDIEKMRVAGRLAAEVLEMIEPYVKPGVSTGELDRICNDYIVNEQHAVSACLGYHGYP
KSVCSISINEVCHGIPDDAKLLKGDIVNIDVTVIKDGFGHGDTSKMFIVGKPTIMGERLCRITQE
SLYLALRMVKPGINLREIGAAIQKFVEAEGFSVVREYCGHGIGRGFHEEPQVLHYDSRETNVVLK
PGMTFTIEPMVNAGKKEIRTMKDGWTVKTKDRSLSAQYEHTIVVTDNGCEILTLRKDDTIPAIIS

>2XYMA

SMSYSWTGALITPCSPEEEKLPINPLSNLLRYHNKVYCTTSKSASQRAKKVTFDRTQVLD AHYD
SVLKDIKLAASKV SARLLTLEEACQLTPPHSARSKYGFGAKEVRSLSGRAVNHIKSVWKD LLEDP
QTPIPTTIMAKNEVFCVDPKAGGKPPARLIVYPDLGVRVCEKMALYDITQKLPQAVMGASYGFQY
SPAQRVEYLLKAWAEKKDPMGFSYDTRCFDSTVTERDIRTEESIYQACSLPEEARTAIHSLTERL
YVGGPMFNSKGQTCGYRRCRASGVLTTSMGNTITCYVKALAACKAAGIVAPTMLVCGDDL VVISE
SQGTEEDERNLRAFTEAMTRYSA PPGDPPRPEYDLELITSCSSNVSV ALGPRGRRRYLARDPTT
PLARAAWETVRHSPIN SWLGNIIQYAPTIWVRMVLMT HFFSILMVQDTLDQNLNFEMYGSVYSVN
PLDLPAI IERLHGLDAFSMHTYSHHELTRVASALRKL GAPPLRVWKSRRARAVRASLISRGGKAAV
CGRYLFNWAVKTKLKLTPLEARLLDLSSWFTV GAGGGDIFHS

00
00
00
00
00
00
00
00
00
00

>2YL8A

NEKLAKKKIVSIDAGRKYFSPEQLKEIIDKAKHYGYTDLHLLVGN DGLRFMLDDMSITANGKTYA
SDDVKRAIEKGTNDYNDPNGNHLTESQMTDLINYAKDKGIGLIPTVNSPGHMDAILNAMKELGI
QNPNFSYFGKKSARTVDLDNEQAVAF TKALIDKYAAYFAKKTEIFNIGLDQYANDATDAKGWSVL
QADKYYPNEGYPVKGYEKFIAYANDLARI VKSHGLKPMAFNDGIYNSDTSFGSFDKDIIVSMWT
GGWGGYDVASSKLLAEKGHQILNTNDAWYVYV LGRNADQGQWYNLDQGLNGIKNTPITSVPKTEGA
DIPIIGGMVAAWADTPSARYSPSRLFKLMRHFANANA EYFAADYESAEQALNEVPKDLNRYTAE S
VTAVKEAEKAI RSLDSNLSRAQQDTIDQAI AKLQETVNNLTLP

00
00
00
00
00
00
00

>2YVOA

MSPWERILLEEILSEPVR LVKERVRHTGRELTYVYRPGPVAASFVLPVTERGTALLVRQYRHPT
GKFLLEVPAQKVDEGETPEAAARRELREEVGAE AETLIPLPSFHPQPSFTAVVFHFPFLALKARV V
TPPTLEEGELLESLELPLTEVYALLAKGEIQDASTALTLFYAEPHLKRLGLL

00
00
00

>2Z3VA

MFKTI LLAYDGSEHARRAAEVAKAEAEAHGARLIVVHAYEPVPDYLGE PPFEEALRRRLERAEGV
LEEARALTGVPKEDALLLEGVPAEAILQAARAEKADLIVMGRGLGALGSLFLG SQSQRVVAEAP

00

>3BV4A

HPALTPEQKKELSDIAHRIVAPGKGILAADESTGSI AKRLQSIGTENTENRRFYRQLLLTADDR
VNPCIGGVILFHETLYQKADDGRFPFPQVIKSKGGVVGIKVDKGVVPLAGTNGETTTQGLVGLSER
CAQYKKGADFAKWRCVLKIGEHTPSALAIMENANVLARYASICQQNGIVPIVEPEILPDGDHDL
KRCQYVTEKVLAAVYKALSDHHIYLEGTL LKPNMVTFGHACTQKYSHEEIAMATVTALRRTVPPA
VTGVTFLSGGQSEEEASINLNAINKCPLLKPWALTFSYGRALQASALKAWGGKKENL KAAQEEYV
KRALANSLACQGKYTS

00
00
00
00
00
0000000000000000

>3CJJA

MAQNITARIGEPLVLKCKGAPKKPPQRLEWKLNTGRTEAWKVLSPQGGGPWDSVARVLPNGSLFL
PAVGIQDEGI FRCQAMNRNGKETKSNYRVRVYQIPGKPEIVDSASELTAGVPNKVGTVCVSEGSYP
AGTLSWHLDGKPLVPNEKGVSVKEQTRRHPETGLFTLQSELMVTPARGGDP RPFTFSCSFSPGLPR
HREALRTAPIQPRVWEVPVPLEEVQL

00
00
00
000000000000000000000000

>3CSZA

MVYVSNKYLTMSMKVNAQYILNYLSSNGWTKQAICGMLGNMQSESTINPGLWQNLDEGNTSLGF
GLVQWTPASNYINWANSQGLPYKNMDELKRIIWEVNNNAQWINLRDMTFKEYIKSTKTPRELAM
IFLASYERPANPNQPERGDQAEYWYKNLS

00
00
000000000000000000000000

>3EAUA

MLQFYRN LGKSLRV SCLGLGTWVTFGGQITDEMAEHLMTLAYDNGINLFDTAEVYAAGKAEVVL
GNI IKKKGWRRSSLVITTKIFWGGKAETERGLSRKHIIEGLKASLERLQLE YVDVVFANRPDPNT
PMEETVRAMTHVINQGMAMYWGTSRWSSMEIMEAYSVARQFNLI PPICEQAEYHMFQREKVEVQL
PELFHKIGVGAMTWSPLACGIVSGKYDSGIPPYSRASLKG YQWLKDKILSEEGRQQAKLKE LQA
IAERLGCTLPQLAI AWCLRNEGVSSVLLGASNAEQLMENIGAIQVLPKLSSSIVHEIDSILGNKP
YS

00
00
00
00
00
00

>3ENJA

ASSTNLKDILADLIPKEQARIKTFRQQHGNTVVGQITVDMMYGGMRGMKGLVYETSVLDPDEGIR
FRGYSIPECQKMLPKAKGGEEPLPEGLFWLLVTGQIPTEEQVSWLSKEWAKRAALPSHVVTMLDN
FPTNLHPMSQLSAAITALNSESNFARAYAEGIHRTKYWELIYEDCMDLIAKLPCVAAKIYRNLYR
EGSSIGAIKLDKLSHNFNMLGYTDAQFTELMRLYLTIHSDHEGGNVAHTSHLVGSALS DPYL
SFAAAMNGLAGPLHGLANQEVLVWLTQLQKEVKGKDVSDKLRDYIWNTLN SGRVVPGYGHAVLRK
TDPRYTCQREFALKHLPDPMFKLVAQLYKIVPNVLEQGKAKNPWPNVDAHSGVLLQYYGMTEM
NYYTVLFGVSRALGVLAQLIWSRALGFPLERPKSMSTDGLIKLVDSK

00
00
00
00
00
00
00

>3FBLA

YHKLRLAIKEICKTDGIPNIKWGMYIAFGEKLLKSYLKMKAGSASSDMIAEYINNAISAFSSRTG
ISQETAQKIADFITSNY
00
0000000000000000

>3GMUB

AGVMTGAKFTQIQFGMTRQQVLDIAGAENCETGGSGFSDSIHCRGHAAGDYAYATFGFTSAAADA
KVDSKSKQEKLLAPSAPTLTLAKFNQVTVMTRAQVLA TVGQGSCTTWSEYYPAYPSTAGVTLSLS
CFDVDGYSSTGFYRGS AHLWFTDGV LQGRQWDLV
00
00
00

>3GOTA

GGACAAAACGCGGAAGGCACGCAAGCACCGGGCACCGAAAAGCCGAAGCC
00

>3GWMA

AIVGVGIDLVSIPDFAEQVDRPGTVFAETFTPGERRDAADKSSSAARHLAARWAAKEAVIKAWSS
SRFSKRPALPEGIHRDIEVVTD MWGRPKVRLS GEI AKHLEDVTI HVSLTHE DQTAAAVAIIEEP
00
00

>3HVVA

SQTVHFQGNPVTVANSIPQAGSKAQFTTLVAKDLSDVTLGQFAGKRKVLNIFPSIDTGVSAA SVR
KFNQLATEIDNTVVLCSADLPFAQSRFCGAEGLNNVITLSTFRNAEFLQAYGVAIADGPLKGLA
ARAVVIDENDNVIFS QLVDEITTEPDYE AALAVLKA
00
00
00

>3HXWA

SKSTAEIRQAFLLDFHSGKHQVVASSSLVPHNDPTLLFTNAGMNQFKDVFLGLDKRNYSRATTSQ
RCVRAGGKHNDLENVGYTARHHTFFEM LGNFSFGDYFKLDAILFAWLLLTSEKWFALPKERLWVT

>4F68A

MVNWAAVVDDFFQELFKAHPEYQNKFGFKGVALGSLKGNAAKYKTLAGKVVDYINAWIGGSADAAG
LASRHKGRNVGSAEFHNAKACLAKACSAHGAPDLGHAIDDLISHL
00
00

>4FCUA

MKHIVI PARFSSRLPGKPLLLIHDRPMLRVVDQAKKVEGFDDLCVATDDERIAEICRAEGVDV
VLTSADHPSGTDRLSEVARIKGDADDIIVNVQGDPELLPAQLVQQVAKLLVDKPNCSMSTLCEP
IHALDEFQRDSIVKVVMSKQNEALYFSRATIPYDRDGAKRDEPTLHTQAFRHLGLYAYRVSLLOE
YVTWEMGKLEKLESLEQLRVLENGHRIAIAVAEANLPPGVDTQADLDRNNMPVESFE
00
00
00
00

>4FIVA

VGTTTTLEKRPEILIFVNGYPIKFLLDTGADITILNRRDFQVKNSIENGRQNMIGVGGGKRGTNY
INVHLEIRDENYKTQCIFGNVCVLEDNSLIQPLLGRDNMIKFNIRLVM
00
00

>4FWYA

VLSEGEWQLVLHVWAKVEADVAGHGQDIHIRLYKSHPETLEKHDRFKHLKTEAEMKASEDLKKHG
VTVLTALGAILKKKGHHEAELKPLAQSHATKHKIPIKYLEFISEAIIHVLHSRHPGDFGADAQGA
MNKALELFRKDIAAKYKELGYQG
00
00
00

>4G57A

LHKEPATLIKAIDGDTVKLMYKGQPMTRLLLVDTPETKHPKKGVEKYGPEASAFTKKMVENAKK
LEVEFDKGQRTDKYGRGLAYLYADGKMVNEALVRQGLAKVAVYKPNNTHEQHRLKSEAQAKKEK
LNIWS
00
00
00000

>4GFXA

VAAIKSFEVVFNDPEKVYGSGEKVAGRVIVEVCEVTRVKAVRILACGVAKVLWMQSQCKQTSE
YLRVEDTLLLEDQPTGENEMVIMRPGNKYKYGKGFELPQGPLGTSFKGKYGCVDYWVKAFLDRPS
QPTQETKKNFEVVDLVDVNTP
00
00
00

>4GULA

SSKKVTLVLSREQSEGVGARVRRSIGRPELKNLDPFLLFDEFKGRPGGFPDHPHRGFETVSYL
LEGGSMAHEDFCGHTGKMNPGLQWMTAGRGILHAEMPCSEEPAHGLQLWVNLRSSSEKMEVPEQYQ
ELKSEEIPKPSKDGVTVAVISGEALGIKSKVYTRTPTLYLDFKLDPGAKHSQPIPKGWTSFIYTI

0000000

>4KMYA

GSRTDLLNVCMDAKHHKTKPGPEDKLDQCSPWKKNACCTASTSQELHKDTSRLYNFNWDHCGKM
EPACKRHF IQDTCLYECSPNLGPWIQQVNQSWRKERFLDVPLCKEDCQRWWEDCHTSHTCKSNWH
RGWDWTSGVNKC PAGALCRTFESYFPTPAALCEGLWSHSYKVSNSYRSGSGRCIQMWFDSAQGNPN
EEVARFYAAAMH

00
00
00
000000000000

>4L9RA

MSLRIGVIGTGKIGKEHINRITNKLSGAEIVAVTSVNQEAAQKVVEQYQLNATVYPNDDSLLADE
NVDALVLT SWGPAHESV LKA IKAQKYVFCEKPLATTAEGCMRIVEEEIKVGKRLVQVGFMRRYD
SGYVQLKEALDNHVIG EPLMIHCAHRNPTVGDNYTTDMAVVDTLVHEIDVLHHLVND DYESVQVI
YPKKSKNALPHLKDPQIVVIETKGGIVINAEIYVNCKYGYDIQCEIVGEDGI IKLPEPSSISLRK
EGRFSTDILMDWQR RFVAAYDVEIQDFIDS IQKKEVSGPTAWDGYIAAVTTDACVKAQESGEKE
KVELKEKPEFYQ

00
00
00
00
00
000000000000

>4MB5A

GTITSQDDNVVVG YWHNWC DGRGYQGGNAPCVELKTVNPQYNV VNISFMKVYDIAEGRIPTFKLD
PTIALSEAEFIAQIDTLNSQGRSVLIALGGADAHIELTRGDEDALAAEII RLTDLYGFDGLDIDL
QQAAITAKDNQFVI PAALKMVKEHYRKTGDNFMITMAPEFPYLTANGAYTPYLTEL DGYDFINP
QFYNQGGDGLWIEGVGWIAQNNDALKEEFIYYIADSLINGTRNYHKI PHDKLVFGLPSNIDAAAT
GYIQDPQDLYKAFDRLKAQGQPLRGVMTWSVNWDMGTDAANN SYNQQFIKDYGNFIHNQLPPVTD
MTPTLSGIVDTRVELDSHF DPLIGITAKDYQGN DITADVTVSGSVNTNQVGDYLLTYSVSSDDET
TNQPRKITVYEILPAFTGITD TTVVIDSEFDPMQGV SASHPTQGDLTANITV TGEVD TNVVG VYE
LTYQLFYGQDNQQNMTDKRIVTVVTD AVSDDDWQV GSTYVKDDKVTHNGATWTAQWWTKGEEPGT
TGEWGVWR

00
00
00
00
00
00
00
00
00000000

>4NLLA

MKIVYWSGTGNTEKMAELIAKGI IESGKDVNTINVS DVNIDELLNEDILILGCSAMDDEVLEESE

00
00

>5E6XA

QECTKFKVSSCRECIESGPGCTWCQKLNFTGPGDPDSIRCDTRPQLLMRGCAADDIMDPTSLAET
QEDHNGGQKQLSPQKVTLYLRLPGQAAAFNVTFRRAKLSRVFLDHNALPDTLKVTYDSFCSNGVT
HRNQPRGDCDGVQINVPITFQVKVTATECIEQESFVIRALGFTDIVTVQVLPQCECRCRDQSRDR
SLCHGKGFLECGICRCDTGYIGKNCECQTQGRSSQELEGSCRKDNNIIICSLGLDCVCGQCLCHT
SDVPGKLIYGQYCEHHHHHH

00
00
00
00
00

>5FFLA

MEDPVTGPEEVSGQEQLTVQCRYTSGWKDYKKYWCQGVPPQRSCKTLVETDASEQLVKKNRVSI
RDNQRDFIFTVTMEDLRMSDAGIYWCGITKGLDPMFKVTVNIGPVPT
00
00

>5GVRA

ILVEGDGIPPIKSFKEMKFFAAILRGLKKKGIHHPTPIQIQIPTILSGRDMIGIAFTGSGKTL
VFTLPVIMFCLEQEKRLPFSKREGPYGLIICPSRELARQTHGILEYYCRLLOEDSSPLLRALCI
GGMSVKEQMETIRHGVHMMVATPGRIMDLLQKKMVSLDICRYLALDEADMIDMGFEGDIRTIFS
YFKGQRQTLFSAATMPKKIQNFAKSALVKPVTINVGRAG

00
00
00
00

>5H0QA

MLYGV EIDEQYLRVME EYKDK E VITQADMAKVALQRKNVYQDQAEKRQ AELKA EYGVGVCVLVRV
YNATGGPITAKIEESFRGHFGAHTREKRIGNGQWTVFIHTKSAGAAVGSAGCIVYGT TDNLDIFS
GWQNPWNRSWDSQV LVEVRQSGHWWKNGSKDYMLHLLDTHNGQNSDSSYGDVKAHGSTGNETTAY
VEYVYSR

00
00
00
0000000

>5IKGA

LNTIDIQGDILVGMHKQKQLFYFFAINDPATFKTHLASDIAPVVASVTQLSNVATQPLVALNIAF
SNTGLLALGVTDNLGDSL FANGQAKDATSFKESTSSWVPQFAGTGIHGVIILASDTDLIDQQVA
SIESTFGSSISKLYSLSASIRPGNEAGHEMFGFLDGIAQPAINGFNTPLPGQNIVDAGVIITGAT
NDPITRPSWAVGGSFLAFRQLEQLVPEFNKYLLDNAPAGSGSLQARADLLGARMVGRWKSGAPID
LTPTADDPALGADAQRNNNFYSHAGFDLGSQSHCPFS SAHIRKTRPRADLGGSLTPPNLSAGAN
SIMRSGIPYGPEVTSAESASNTTQERGGAFVAYQAQLSQGFHFLQQTWADNANFPPGKTPATVG
LDPIIGQNNGQPRVVNGLLPSNSSASLSIPQFVVSHGGEYFFSPPI SAIGRLSA

00000000000000000000000000000000

>5M3UA

SLSNKLTLDKLDVKGRVVMRVDFNVPMKNNQITNNQRIKAAVPSIKFCLDNGAKSVVLMSHLGR
PDGVPMFDKYSLEPVAVELKSLGKDVLFLKDCVGPVEVEKACANPAAGSVILLENLRFHVEEEGK
GKDASGNKVKAEPKIEAFRASLSKLGDVYVNDAFGTAHRAHSSMVGVNLPQKAGGFLMKKELNY
FAKALESPPFLAILGGAKFADKIQILINMLDKVNEMIIGGGMAFTFLKVLNNMEIGTSLFDEE
GAKIVKDLMSKAEKNGVKITLPVDFVTADKFDENAKTGQATVASGIPAGWMGLDCGPESKKYAE
AVTRAKQIVWNGPVGVFEWEAFARGTKALMDEVVKATSRGCITIIGGGDTATCCAKWNTEDKVSH
VSTGGASLELLEGGKVLPGVDALSNI

00
00
00
00
00
00
00
000000000000000000000000

>5MF5A

ASPSELRRALEANEFIPYYQPLSPGQGRWIGVEVLMRWRHPREGLIRPDFLIPFAERSGLIVP
MTRALMRQVAEDLGGHAGKLEPGFHIGFNI SATHCHELALVDDCRELLAAFPFGHITLVLELTER
ELIESSEVTDRFLDELHALGVKIAIDDFGTGHSSLAYLRKFQVDCCLKIDQSFVARIGIDTLSGHI
LDSIVELSAKLDDLIVAEVETPEQRDYLAARGVDYLGQYLIGRPMPLSLSSLTVQEQQ
00
00
00
00

>5MGUA

AAPGSVELLGSYPQDDHSNLTRKVLTRVGRNLHNQQHHPWLLIKERVKEHFYKQYVGRFGTPL
FSVYDNLSPVVTTWQNFDSELLIPADHPSRKKGDNYLNRTHMLRAHTSAHQWDLHAGLDAFLVV
GDVYRRDQIDSQHYPFIHQLEAVRLF SKHELFAGIKDGESLQLF EQSSRS AHKQETH TMEAVKLV
EFDLKQMLTRLMALHFGDELEIRWVDCYFPFTHPSFEMEINFHGEWLEVLGCGVMEQQLVNSAGA
QDRIGWAFGLGLERLAMILYDIPDIRLFWCEDERFLKQFCVSNINQVKFQPLSKYP AVINDISF
WLPSENYAENDFYDLVRTIGGDLVEKVDLIDKVFHPKTHKTSHCYRITYRHMERTLSQREVRHIH
QALQEAAVQLLGVGRF

00
00
00
00
00
00
000000000000000000000000

>5MJCA

RPESLIRQSWRVVSRSPLEHGTVL FARLFALEP SLLPLFQYNGRQFSSPEDSLSSPEFLDHIRK
VMLVIDAAVTNVEDLSSLEEYLTSLGRKHRAVGVRLSSSFSTVGE SLLYMLEKSLGPDFTPATRTA
WSRLYGAVVQAMSRGWDG

>6CSLA

QGENISSLLRELYAKPLSERHVESDGLIFDPAQITSRTANGVAVPHGDHYHFIPYSQLSPLEEKL
ARI IPL

00
000000

>6D2NA

ALQQLFENNVRWAEAIKQEDPDFFAKLARQQTPEYLLWIGCS DARVPANEIVGMLPGDLFVHRNVA
NVVLHTDLNCLSVIQFAVDVLKVKHILVTGHYGCGVVRASLHNDQLGLIDGWLRSIRD LAYEYRE
HLEQLPTEEERVDRLCELNVIQQVANVSHTSIVQNAWHRGQSLSVHGCIYGIKDGLWKNLNVTVS
GLDQLPPQYRLSPL

00
00
00
00000000000000

>6E4NA

GSHMRVQVSGMSDETTWHTLKDHLRQAGEVTFCCKVFSGGRAVVEFVTPEDAARAITELQASELEG
ATLFLR

00
000000

>6EK9A

LGGVDREAMARCIEECLRCAQACTACADA CLSEPAVADLTKCIRTDMDCADVCTATAAVLSRHTG
YDANVTRAVLQACATVCAACGDECARHAGMHEHCRVCAEACRSCEQACQELLAGLG

00
00

>6ENOA

GADNRELWKVLNVLDLEKHDEF LAPVPAVYRELF LNRPNRPRAMAYF DAVVGD IHGIRVHELYNLK
QEGKKVFATFCVYVPEEI INATGSACIGLCGGAQYTV PAGETV LPRNLCPLIKS AMGFKIERICP
YFQVADYVVGETTCDGKKKAWEILNEYIPVYVMELPQKKEERDRKFWEEEIKDFAQFVEEKTGVK
LNAENLRAGIEKINKKRKALKRLSDLRKHN PAPIHGLDVLLINQLAFFDDPERFATKVNELCDEL
EERVAKGEGVSKDAPRILITGTPQPI PHWKIHALIEGAGGVVGEETCIGERYFKDLVEPAADV
EGMLKNIAARSLKVNACFTPNTRLEDILSMVQKLQVDGVIHYSLQFCQPYGVESYLVGRELER
RNIPFLKLESDFSEEDQGQLKTRIEAFLEMI

00
00
00
00
00
00
00

>6ESRA

AAWACFRLDGRTL LRVRGPDAAPFLLG LLTNELPLPSPAAAGAPPAARAGYAHFLNVQGR TLYDV
ILYGLQEHSVSGFLECDSSVQ GALQKHLALYRIRRKVTVEPHPELRVWAVLPSSPEACGAASL
QERAGAAA ILIRDPRTARMGWRLLTQDEGPALVPGGRLGDLWDYHQHRYLQGVPEGVRDLPPGVA
LPLESNLAFMNGVSFTKGCYIGQELTARTHMGVIRKRLFVVRFLDPLPTSGITPGATVLTASGQ

