

YICF_ECOLI/310-393 QVAEVKAIQFAVGKSGK- ISVVASLAPVMLDDKKVQRVNIGSVRRWQEWDIAPGDQILVSLAGQGIPRIIDDVWRGAERTKPTTP P
 DNLJ_TREPA/302-380 AITTLRDVQWQT- -SGVTYTPIGITDPVRLAGTTVKRANLCNPNMLTKLCLKIGSHVLISKRGEIIPKIEALVS- -T- -PAHAQEI E
 DNLJ_HELPJ/312-393 KHTKIVGVINQVGRSGA- ITPVALLEPVEIAGAMVNRATLHNYSEIEKKNIMLNDRVVVRSGDVIPIIKPLE- -SYRDGSQQKIK
 DNLJ_HAEIN/330-411 ELTLLNDVEFQVGRGTGA- ITPVAKLEPVFVAGVTVSNATLHNGDEIERLNIAIGDTVVIFRAGDVIPIIGVLH- -ERRPDNAKP P
 Q9RBF2_ALTHA/320-401 EITQLLDVDFQVGRGTGA- ITPVARLKPVFVGGVTVSNATLHNSDEVARLGVKVGDTVIIFRAGDVIPIITQVVL- -ERRPDDARDD
 DNLJ_ECOLI/320-401 QMTFVRDVEFQVGRGTGA- ITPVARLEPVHVAGVLVSNATLHNADEIERLGLRIGDKVVIFRAGDVIPOVVNVVL- -SERPEDTRE E
 DNLJ_ZYMMO/348-426 AQTTLLDIEIQVGRGTGV- LTPVAKLEPVTVGGVVSSATLHNSDEIERLGVRPGDRVLVGRAGDVIPIIVENLT- - - -PDVDRP P
 DNLJ_RICPR/326-406 -QTKLLSITVQVGRTGM- LTPVAELDPIEIGGVVVSRA TLHNFQDIARKDVR IKDYVFLGRAGDVIPIITGVDI- -SKRSNDTVK K
 DNLJ_STRCO/335-416 VNTKLVDIKVG VGRGTGR- VTPYAQVEPMTVAGSEVEFATLHNQEVVKAGVLI GDTVVLKAGDVIPEILGPVA- -DLRDGSERE E
 DNLJ_MYCTU/330-411 AQTKLLDIRVNVGRGTGR- ITPFAFMTPVKVAGSTVGQATLHNASEIKRKGVLIGDTVVIFRAGDVIPEVLGPVV- -ELRDGSERE E
 DNLJ_THEMA/321-402 ARTRVLDVTIQVGRGTGV- LTPVAELEPVQLAGTIVKRASLHNFYIIEKDIRIGDYVFVEKAGGIPIPIVKSIP- -ELRTGNEKE E
 DNLJ_RHOMR/362-443 AITRLLDIMVSVGRGTGV- VKPVAVLEPVEVGGVTVSQATLHNEDYVRSRDIRIGDLVVVIRAGDVIPOVVRPVV- -EARTGNERP P
 DNLJ_AQUAE/350-431 AVTKLVDVVFQVGRGTGT- ITPVGKLEPVELGGVTVSSVSLFNEDFIREKDIRIGDWVVVERAGDVIPIVVEVLK- -EKRTGEEKP P
 Q9ZFY2_9DEIN/236-317 KETRLLDVVFQVGRGTGR- VTPVGILEPVLIEGSEVSRVTLHNSYIEELDIRIGDWLVVKAGGVIPVLRVLK- -ERRTGAERP P
 DNLJ_BACSU/316-397 VVTKLDDIELNVGRGTGV- ITPTAILEPVKVAGTTVSRASLHNEDLIEKDIRILDKVVVKAGDIPEVVNVLV- -DQRTGEEKE E
 DNLJ_BACST/315-396 VTTLLIGIEVNVGRGTGV- VTPTAILEPVRVAGTTVQRATLHNEDFIREKDIRIGDAVILKAGDIPEVVGVVV- -DRRDGDETP P
 DNLJ_SYNY3/319-400 TPTVVKAIEVNVGRGTGA- VTPLAVMPEVQLAGTTVQRATLHNQDRIQELDIRVGDTVIIRKAGEIPEVVRVMT- -ELRPENTTP P
 Q99540_HUMAN/327-408 ALTVVRDIEWTVGRGTGA- VTPTAIMDPVQLAGTTVQRASLHNPDYLOQKDIRIGDTVTLKAGDIPEVGQVIL- -SQRPADSIAA
 DNLJ_CHLTR/315-396 AETILEDIVVQVGKTGI- LTPVAELAPVFLSGSRVSRASLYNQDEIEKDIRIGDSVYVEKGGEVIPKIVGINL- -AKRSLESEP P
 DNLJ_CHLPN/316-397 AETLLEDILVQVGRGTGV- LTPVAKLTPVLLSGSLVSRASLYNEDEIHRKDIRIGDTVCVKGGEVIPKVVVRVCR- -EKRPEGSEVV
 Q9RSQ5_DEIRA/330-411 VETVLESITVNVGRGTGK- LAPLAHLSPRLIEGSTVSKATLHNEDYIRDMDLRVGDTVLRKSGGVIPIMRVLP- -DKRPADAAP P
 DNLJ_MYCGE/310-391 VQTKLTAVLITIGRTGR- VNYTAKLESVNLGDKVTAA TLHNFYI KTKDIRINDTVVIYKAGEIPKVLKVN- -EKRKNDTII I
 DNLJ_MYCPN/309-390 VQTKLRGVLVTIGRTGK- INYTAQLDPVNLGTVVSAATLHNFYI KTKDIRLNDTVIYKAGEIPKVLLEVCL- -PLRTAANQPI P

(1)

Generate a global similarity matrix by pairwise sequence comparison

(2(a)) Generate local distance matrices from alignment windows

(3,4,5) Compare correlation coefficients between windows to estimate those of functional significance

(2(b)) Generate correlation coefficients by comparison of local and global matrices

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