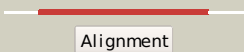

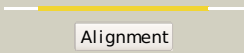



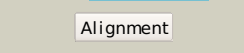



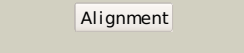

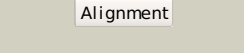

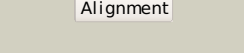
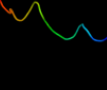


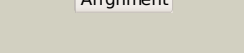

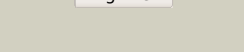

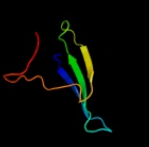










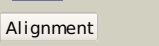
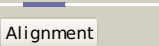
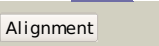

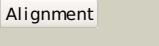
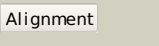

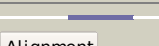
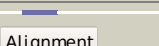
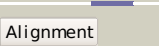
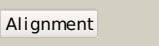
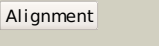

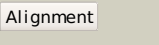
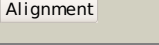
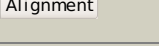
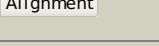
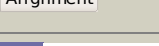




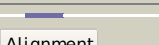
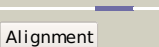

Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P05706
Date	Thu Jan 5 10:58:48 GMT 2012
Unique Job ID	f6e897e40f881088

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2f9ha1	 Alignment		100.0	30	Fold: PTSIIA/GutA-like Superfamily: PTSIIA/GutA-like Family: PTSIIA/GutA-like
2	c2xdpA	 Alignment		74.9	13	PDB header: oxidoreductase Chain: A: PDB Molecule: lysine-specific demethylase 4c; PDBTitle: crystal structure of the tudor domain of human jmjd2c
3	d1k0ha	 Alignment		37.8	16	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: gpFII-like
4	d2gp4a1	 Alignment		37.7	18	Fold: The "swivelling" beta/beta/alpha domain Superfamily: LeuD/IlvD-like Family: IlvD/EDD C-terminal domain-like
5	c2qqSB	 Alignment		30.4	15	PDB header: oxidoreductase Chain: B: PDB Molecule: jmjc domain-containing histone demethylation PDBTitle: jmjd2a tandem tudor domains in complex with a trimethylated2 histone h4-k20 peptide
6	d1p9ka	 Alignment		27.8	20	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: YbcJ-like
7	c2jqlA	 Alignment		27.1	17	PDB header: cell cycle Chain: A: PDB Molecule: dna damage response protein kinase dun1; PDBTitle: nmr structure of the yeast dun1 fha domain in complex with2 a doubly phosphorylated (pt) peptide derived from rad533 scd1
8	c3vg8F	 Alignment		26.1	41	PDB header: unknown function Chain: F: PDB Molecule: hypothetical protein tthb210; PDBTitle: crystal structure of hypothetical protein tthb210 from thermus2 thermophilus hb8
9	c3a5zF	 Alignment		26.0	29	PDB header: ligase Chain: F: PDB Molecule: elongation factor p; PDBTitle: crystal structure of escherichia coli genx in complex with elongation2 factor p
10	d1ueba1	 Alignment		23.9	14	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: eIF5a N-terminal domain-like
11	c3cpfB	 Alignment		23.5	12	PDB header: cell cycle Chain: B: PDB Molecule: eukaryotic translation initiation factor 5a-1; PDBTitle: crystal structure of human eukaryotic translation initiation factor2 eif5a

12	c2fhdA	Alignment		22.9	22	PDB header: cell cycle Chain: A: PDB Molecule: dna repair protein rhp9/crb2; PDBTitle: crystal structure of crb2 tandem tudor domains
13	d2g50a1	Alignment		22.2	12	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
14	d2vv5a1	Alignment		20.9	21	Fold: Sm-like fold Superfamily: Sm-like ribonucleoproteins Family: Mechanosensitive channel protein MscS (YggB), middle domain
15	d1kzla2	Alignment		20.8	12	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin synthase domain-like Family: Riboflavin synthase
16	c1xtdA	Alignment		20.5	18	PDB header: translation Chain: A: PDB Molecule: eukaryotic initiation factor 5a; PDBTitle: structural analysis of leishmania mexicana eukaryotic initiation2 factor 5a
17	d2pp6a1	Alignment		20.5	25	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: gpFil-like
18	d1k8ga2	Alignment		20.3	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
19	d1i8da2	Alignment		19.2	12	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin synthase domain-like Family: Riboflavin synthase
20	c2fphX	Alignment		19.1	11	PDB header: dna binding protein Chain: X: PDB Molecule: ylmh; PDBTitle: cell division protein ylmh from streptococcus pneumoniae
21	c3hksB	Alignment	not modelled	18.8	14	PDB header: translation, rna binding protein Chain: B: PDB Molecule: eukaryotic translation initiation factor 5a-2; PDBTitle: crystal structure of eukaryotic translation initiation2 factor eif-5a2 from arabidopsis thaliana
22	c1bkbA	Alignment	not modelled	18.3	19	PDB header: translation Chain: A: PDB Molecule: translation initiation factor 5a; PDBTitle: initiation factor 5a from archeobacterium pyrobaculum2 aerophilum
23	d1liua1	Alignment	not modelled	17.3	10	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
24	c3treA	Alignment	not modelled	17.2	10	PDB header: translation Chain: A: PDB Molecule: elongation factor p; PDBTitle: structure of a translation elongation factor p (efp) from coxiella2 burnetii
25	d1pkma1	Alignment	not modelled	16.8	12	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
26	c2v43A	Alignment	not modelled	16.7	12	PDB header: regulator Chain: A: PDB Molecule: sigma-e factor regulatory protein rseb; PDBTitle: crystal structure of rseb: a sensor for periplasmic stress2 response in e. coli
27	d1jb7a2	Alignment	not modelled	16.7	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
28	c3degC	Alignment	not modelled	16.5	19	PDB header: ribosome Chain: C: PDB Molecule: gtp-binding protein lepa; PDBTitle: complex of elongating escherichia coli 70s ribosome and ef4(lepa)-2 gmppnp

29	c3er0A_		not modelled	16.4	7	PDB header: translation Chain: A: PDB Molecule: eukaryotic translation initiation factor 5a-2; PDBTitle: crystal structure of the full length eif5a from2 saccharomyces cerevisiae
30	d2cqaa1		not modelled	16.1	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: TIP49 domain
31	c2jkdB_		not modelled	15.8	22	PDB header: gene regulation Chain: B: PDB Molecule: pre-mrna leakage protein 1; PDBTitle: structure of the yeast pml1 splicing factor and its2 integration into the res complex
32	d1a3xa1		not modelled	14.5	7	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
33	d1mzka_		not modelled	14.4	11	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
34	c2eifA_		not modelled	13.7	14	PDB header: gene regulation Chain: A: PDB Molecule: protein (eukaryotic translation initiation factor 5a); PDBTitle: eukaryotic translation initiation factor 5a from methanococcus2 jannaschii
35	c3igzB_		not modelled	13.5	28	PDB header: isomerase Chain: B: PDB Molecule: cofactor-independent phosphoglycerate mutase; PDBTitle: crystal structures of leishmania mexicana phosphoglycerate2 mutase at low cobalt concentration
36	c2kzbA_		not modelled	13.5	18	PDB header: protein transport Chain: A: PDB Molecule: autophagy-related protein 19; PDBTitle: solution structure of alpha-mannosidase binding domain of atg19
37	d1udxa3		not modelled	13.1	11	Fold: Obg GTP-binding protein C-terminal domain Superfamily: Obg GTP-binding protein C-terminal domain Family: Obg GTP-binding protein C-terminal domain
38	d1bdoa_		not modelled	12.8	21	Fold: Barrel-sandwich hybrid Superfamily: Single hybrid motif Family: Biotinyl/lipoyl-carrier proteins and domains
39	c1r21A_		not modelled	12.7	11	PDB header: cell cycle Chain: A: PDB Molecule: antigen ki-67; PDBTitle: solution structure of human ki67 fha domain
40	d2c78a1		not modelled	12.3	22	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
41	c2z14A_		not modelled	12.1	12	PDB header: signaling protein Chain: A: PDB Molecule: ef-hand domain-containing family member c2; PDBTitle: crystal structure of the n-terminal duf1126 in human ef-2 hand domain containing 2 protein
42	d1e0ta1		not modelled	11.9	18	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
43	d2dyla1		not modelled	11.8	25	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
44	d2affa1		not modelled	11.4	11	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
45	c1uebB_		not modelled	11.2	14	PDB header: rna binding protein Chain: B: PDB Molecule: elongation factor p; PDBTitle: crystal structure of translation elongation factor p from2 thermus thermophilus hb8
46	c2vv5D_		not modelled	11.1	21	PDB header: membrane protein Chain: D: PDB Molecule: small-conductance mechanosensitive channel; PDBTitle: the open structure of msccs
47	d1njib1		not modelled	11.1	22	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
48	d1awwa_		not modelled	11.1	9	Fold: SH3-like barrel Superfamily: SH3-domain Family: SH3-domain
49	c3gqsB_		not modelled	11.0	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: adenylate cyclase-like protein; PDBTitle: crystal structure of the fha domain of ct664 protein from chlamydia2 trachomatis
50	d1kzla1		not modelled	10.9	12	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin synthase domain-like Family: Riboflavin synthase
51	c2jpeA_		not modelled	10.9	25	PDB header: transcription Chain: A: PDB Molecule: nuclear inhibitor of protein phosphatase 1; PDBTitle: fha domain of nipp1
52	d1s04a_		not modelled	10.6	24	Fold: PUA domain-like Superfamily: PUA domain-like Family: ProFAR isomerase associated domain
53	c3oyyA_		not modelled	10.5	5	PDB header: translation Chain: A: PDB Molecule: elongation factor p; PDBTitle: structure of pseudomonas aeruginosa elongation factor p
54	d2phcb1		not modelled	10.5	29	Fold: Cyclophilin-like Superfamily: Cyclophilin-like Family: PH0987 C-terminal domain-like

55	d1gl4a1	Alignment	not modelled	10.3	18	Fold: GFP-like Superfamily: GFP-like Family: Domain G2 of nidogen-1
56	c2phcB_	Alignment	not modelled	10.3	29	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein ph0987; PDBTitle: crystal structure of conserved uncharacterized protein ph0987 from2 pyrococcus horikoshii
57	d1f60a1	Alignment	not modelled	10.3	25	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
58	d1o8ba1	Alignment	not modelled	10.2	29	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
59	cli8dB_	Alignment	not modelled	10.1	19	PDB header: transferase Chain: B: PDB Molecule: riboflavin synthase; PDBTitle: crystal structure of riboflavin synthase
60	c1a3wB_	Alignment	not modelled	9.7	7	PDB header: transferase Chain: B: PDB Molecule: pyruvate kinase; PDBTitle: pyruvate kinase from saccharomyces cerevisiae complexed with fbp, pg,2 mn2+ and k+
61	d1mkfa_	Alignment	not modelled	9.6	21	Fold: Viral chemokine binding protein m3 Superfamily: Viral chemokine binding protein m3 Family: Viral chemokine binding protein m3
62	c3elsA_	Alignment	not modelled	9.6	22	PDB header: splicing Chain: A: PDB Molecule: pre-mrna leakage protein 1; PDBTitle: crystal structure of yeast pml1p, residues 51-204
63	cliz6B_	Alignment	not modelled	9.6	14	PDB header: biosynthetic protein Chain: B: PDB Molecule: initiation factor 5a; PDBTitle: crystal structure of translation initiation factor 5a from pyrococcus2 horikoshii
64	c3poaA_	Alignment	not modelled	9.5	28	PDB header: peptide binding protein Chain: A: PDB Molecule: putative uncharacterized protein tb39.8; PDBTitle: structural and functional analysis of phosphothreonine-dependent fha2 domain interactions
65	d1yjma1	Alignment	not modelled	9.0	35	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
66	d2g1la1	Alignment	not modelled	8.8	17	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
67	c2kzkA_	Alignment	not modelled	8.8	14	PDB header: protein transport Chain: A: PDB Molecule: uncharacterized protein yol083w; PDBTitle: solution structure of alpha-mannosidase binding domain of atg34
68	c1ybyB_	Alignment	not modelled	8.6	24	PDB header: translation Chain: B: PDB Molecule: translation elongation factor p; PDBTitle: conserved hypothetical protein cth-95 from clostridium2 thermocellum
69	c3fm8A_	Alignment	not modelled	8.3	29	PDB header: transport protein/hydrolase activator Chain: A: PDB Molecule: kinesin-like protein kif13b; PDBTitle: crystal structure of full length centaurin alpha-1 bound with the fha2 domain of kif13b (capri target)
70	d1pkla1	Alignment	not modelled	8.3	12	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: Pyruvate kinase beta-barrel domain
71	d1bkba1	Alignment	not modelled	8.3	19	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: eIF5a N-terminal domain-like
72	d2qgra2	Alignment	not modelled	8.2	17	Fold: SH3-like barrel Superfamily: Tudor/PWWP/MBT Family: Tudor domain
73	c2zpmA_	Alignment	not modelled	8.1	13	PDB header: hydrolase Chain: A: PDB Molecule: regulator of sigma e protease; PDBTitle: crystal structure analysis of pdz domain b
74	c3e20A_	Alignment	not modelled	8.1	19	PDB header: translation Chain: A: PDB Molecule: eukaryotic peptide chain release factor gtp-binding PDBTitle: crystal structure of s.pombe erf1/erf3 complex
75	d2g82a1	Alignment	not modelled	7.8	12	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
76	c1h4uA_	Alignment	not modelled	7.7	20	PDB header: extracellular matrix protein Chain: A: PDB Molecule: nidogen-1; PDBTitle: domain g2 of mouse nidogen-1
77	d1gtta1	Alignment	not modelled	7.5	12	Fold: FAH Superfamily: FAH Family: FAH
78	d2zjrm1	Alignment	not modelled	7.4	19	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: Ribosomal protein L19
79	d3etja1	Alignment	not modelled	7.4	44	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: BC C-terminal domain-like
80	d2p13a1	Alignment	not modelled	7.4	16	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
81	d1o8bb1	Alignment	not modelled	7.3	31	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
						PDB header: structural genomics, unknown function

82	c3gmgB_	Alignment	not modelled	7.3	15	Chain: B: PDB Molecule: uncharacterized protein rv1825/mt1873; PDBTitle: crystal structure of an uncharacterized conserved protein2 from mycobacterium tuberculosis
83	d2eifa1	Alignment	not modelled	7.3	14	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: elF5a N-terminal domain-like
84	c2p5dA_	Alignment	not modelled	7.3	32	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0310 protein mjec136; PDBTitle: crystal structure of mjec136 from methanocaldococcus2 jannaschii dsm 2661
85	c3gqjA_	Alignment	not modelled	7.2	25	PDB header: unknown function Chain: A: PDB Molecule: cell inhibiting factor (cif); PDBTitle: crystal structure of cell inhibiting factor (cif) from photorhabdus2 luminescens
86	d2brfa1	Alignment	not modelled	7.1	29	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
87	dliz6a1	Alignment	not modelled	7.0	14	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: elF5a N-terminal domain-like
88	c3l1bA_	Alignment	not modelled	7.0	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of the protein pa3983 with unknown2 function from pseudomonas aeruginosa pao1
89	d3deda1	Alignment	not modelled	7.0	11	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
90	c1yj5C_	Alignment	not modelled	7.0	35	PDB header: transferase Chain: C: PDB Molecule: 5' polynucleotide kinase-3' phosphatase fha domain; PDBTitle: molecular architecture of mammalian polynucleotide kinase, a dna2 repair enzyme
91	d2cowa1	Alignment	not modelled	6.9	29	Fold: SH3-like barrel Superfamily: Cap-Gly domain Family: Cap-Gly domain
92	d1f3ta1	Alignment	not modelled	6.7	22	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
93	c3hx1B_	Alignment	not modelled	6.6	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: slr1951 protein; PDBTitle: crystal structure of the slr1951 protein from synechocystis sp.2 northeast structural genomics consortium target sgr167a
94	d2plia1	Alignment	not modelled	6.5	16	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
95	d2o3ga1	Alignment	not modelled	6.5	17	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
96	c3cfuA_	Alignment	not modelled	6.5	28	PDB header: lipoprotein Chain: A: PDB Molecule: uncharacterized lipoprotein yjha; PDBTitle: crystal structure of the yjha protein from bacillus2 subtilis. northeast structural genomics consortium target3 sr562
97	d2toda1	Alignment	not modelled	6.5	18	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
98	d2o1ra1	Alignment	not modelled	6.4	11	Fold: FAD-binding/transporter-associated domain-like Superfamily: FAD-binding/transporter-associated domain-like Family: CorC/HlyC domain-like
99	d2ff4a3	Alignment	not modelled	6.4	19	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain