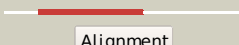

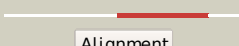

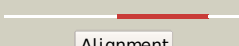
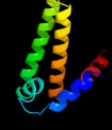


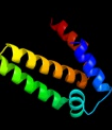




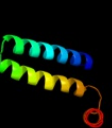


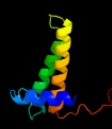





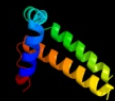





Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P06989
Date	Thu Jan 5 10:59:47 GMT 2012
Unique Job ID	5e0299ff3582fa48

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	dlzpsa1	 Alignment		100.0	37	Fold: Hisl-like Superfamily: Hisl-like Family: Hisl-like
2	d2a7wa1	 Alignment		100.0	36	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: HisE-like (PRA-PH)
3	c2a7wF_	 Alignment		100.0	36	PDB header: hydrolase Chain: F: PDB Molecule: phosphoribosyl-atp pyrophosphatase; PDBTitle: crystal structure of phosphoribosyl-atp pyrophosphatase2 from chromobacterium violaceum (atcc 12472). nesg target3 cvr7
4	d1yvwa1	 Alignment		100.0	32	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: HisE-like (PRA-PH)
5	c1yvwD_	 Alignment		100.0	32	PDB header: hydrolase Chain: D: PDB Molecule: phosphoribosyl-atp pyrophosphatase; PDBTitle: crystal structure of phosphoribosyl-atp2 pyrophosphohydrolase from bacillus cereus. nesgc target3 bcr13.
6	d1y6xa1	 Alignment		100.0	30	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: HisE-like (PRA-PH)
7	d1yxba1	 Alignment		99.9	33	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: HisE-like (PRA-PH)
8	c3crcB_	 Alignment		98.8	23	PDB header: hydrolase Chain: B: PDB Molecule: protein mazg; PDBTitle: crystal structure of escherichia coli mazg, the regulator2 of nutritional stress response
9	c2yxhB_	 Alignment		98.8	24	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: mazg-related protein; PDBTitle: crystal structure of mazg-related protein from thermotoga maritima
10	d1vmga_	 Alignment		98.5	19	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like
11	d2a3qa1	 Alignment		98.3	23	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like

12	c3obcB_	Alignment		98.3	20	PDB header: hydrolase Chain: B: PDB Molecule: pyrophosphatase; PDBTitle: crystal structure of a pyrophosphatase (af1178) from archaeoglobus2 fulgidus at 1.80 a resolution
13	d2gtad1	Alignment		98.3	15	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like
14	c2q4pA_	Alignment		98.3	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein rs21-c6; PDBTitle: ensemble refinement of the crystal structure of protein from mus2 musculus mm.29898
15	d2gtaa1	Alignment		98.2	16	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like
16	c2q9lA_	Alignment		98.1	24	PDB header: hydrolase Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of imazg from vibrio dat 722: ctag-imazg (p43212)
17	d2oiea1	Alignment		98.0	22	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: MazG-like
18	c2yf3F_	Alignment		96.3	25	PDB header: hydrolase Chain: F: PDB Molecule: mazg-like nucleoside triphosphate pyrophosphohydrolase; PDBTitle: crystal structure of dr2231, the mazg-like protein from2 deinococcus radiodurans, complex with manganese
19	c2rfpA_	Alignment		84.3	13	PDB header: hydrolase Chain: A: PDB Molecule: putative ntp pyrophosphohydrolase; PDBTitle: crystal structure of putative ntp pyrophosphohydrolase2 (yp_001813558.1) from exiguobacterium sibiricum 255-15 at 1.74 a3 resolution
20	c2p06A_	Alignment		71.2	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein af_0060; PDBTitle: crystal structure of a predicted coding region af_0060 from2 archaeoglobus fulgidus dsm 4304
21	d2p06a1	Alignment	not modelled	71.2	23	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: AF0060-like
22	d1ulva4	Alignment	not modelled	41.9	11	Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Bacterial glucoamylase N-terminal domain-like
23	d1lf6a2	Alignment	not modelled	38.2	21	Fold: Supersandwich Superfamily: Galactose mutarotase-like Family: Bacterial glucoamylase N-terminal domain-like
24	d1m4ka2	Alignment	not modelled	33.8	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: I set domains
25	d1nkra2	Alignment	not modelled	32.0	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: I set domains
26	d1nvma1	Alignment	not modelled	31.1	15	Fold: RuvA C-terminal domain-like Superfamily: post-HMGL domain-like Family: DmpG/LeuA communication domain-like
27	d1qcqa_	Alignment	not modelled	25.1	17	Fold: UBC-like Superfamily: UBC-like Family: UBC-related
28	d1j3ea_	Alignment	not modelled	23.0	21	Fold: Replication modulator SeqA, C-terminal DNA-binding domain Superfamily: Replication modulator SeqA, C-terminal DNA-binding domain Family: Replication modulator SeqA, C-terminal DNA-binding domain
						PDB header: transcription

29	c2a2oG	Alignment	not modelled	21.7	11	Chain: G: PDB Molecule: hypothetical protein bt3146; PDBTitle: crystal structure of a putative tRNA family transcriptional regulator2 (bt_3146) from bacteroides thetaiotaomicron vpi-5482 at 2.16 a3 resolution
30	c2z1dA	Alignment	not modelled	19.6	20	PDB header: metal binding protein Chain: A: PDB Molecule: hydrogenase expression/formation protein hypd; PDBTitle: crystal structure of [nife] hydrogenase maturation protein, hypd from2 thermococcus kodakaraensis
31	d1axib1	Alignment	not modelled	18.1	23	Fold: Immunoglobulin-like beta-sandwich Superfamily: Fibronectin type III Family: Fibronectin type III
32	c2i7uA	Alignment	not modelled	17.1	28	PDB header: de novo protein/ligand binding protein Chain: A: PDB Molecule: four-alpha-helix bundle; PDBTitle: structural and dynamical analysis of a four-alpha-helix2 bundle with designed anesthetic binding pockets
33	d2od6a1	Alignment	not modelled	16.1	50	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Marine metagenome family DABB1
34	c1z6rC	Alignment	not modelled	15.6	14	PDB header: transcription Chain: C: PDB Molecule: mlc protein; PDBTitle: crystal structure of mlc from escherichia coli
35	c3loeA	Alignment	not modelled	13.8	31	PDB header: antimicrobial protein Chain: A: PDB Molecule: neutrophil defensin 1; PDBTitle: crystal structure of human alpha-defensin 1 (f28a mutant)
36	d1z05a2	Alignment	not modelled	13.7	20	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
37	d1z2ua1	Alignment	not modelled	13.5	21	Fold: UBC-like Superfamily: UBC-like Family: UBC-related
38	d2a2ma1	Alignment	not modelled	13.5	11	Fold: Heme oxygenase-like Superfamily: Heme oxygenase-like Family: TENA/THI-4
39	c3gnyA	Alignment	not modelled	13.3	31	PDB header: antimicrobial protein Chain: A: PDB Molecule: neutrophil defensin 1; PDBTitle: crystal structure of human alpha-defensin 1 (hnp1)
40	c3lo7A	Alignment	not modelled	13.2	25	PDB header: transferase Chain: A: PDB Molecule: penicillin-binding protein a; PDBTitle: crystal structure of pbpa from mycobacterium tuberculosis
41	d1id3b	Alignment	not modelled	13.1	10	Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
42	d1pjua2	Alignment	not modelled	12.8	39	Fold: Plant proteinase inhibitors Superfamily: Plant proteinase inhibitors Family: Plant proteinase inhibitors
43	c3hj2B	Alignment	not modelled	12.0	31	PDB header: antimicrobial protein Chain: B: PDB Molecule: human neutrophil peptide 1; PDBTitle: crystal structure of covalent dimer of hnp1
44	c3ue3A	Alignment	not modelled	11.9	25	PDB header: transferase Chain: A: PDB Molecule: septum formation, penicillin binding protein 3, PDBTitle: crystal structure of acinetobacter baumannii pbp3
45	c3equB	Alignment	not modelled	11.6	44	PDB header: biosynthetic protein Chain: B: PDB Molecule: penicillin-binding protein 2; PDBTitle: crystal structure of penicillin-binding protein 2 from neisseria2 gonorrhoeae
46	d1nkra1	Alignment	not modelled	11.4	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: I set domains
47	d1jea1	Alignment	not modelled	11.2	13	Fold: SPOC domain-like Superfamily: SPOC domain-like Family: Ku70 subunit middle domain
48	c2ap1A	Alignment	not modelled	11.1	12	PDB header: transferase Chain: A: PDB Molecule: putative regulator protein; PDBTitle: crystal structure of the putative regulatory protein
49	d2zjrs1	Alignment	not modelled	11.0	6	Fold: Ribosomal protein L25-like Superfamily: Ribosomal protein L25-like Family: Ribosomal protein L25-like
50	c2kloA	Alignment	not modelled	10.9	15	PDB header: cell cycle Chain: A: PDB Molecule: dna replication factor cdt1; PDBTitle: structure of the cdt1 c-terminal domain
51	d2afja1	Alignment	not modelled	10.9	9	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: SPRY domain
52	d1iqpa1	Alignment	not modelled	10.6	21	Fold: post-AAA+ oligomerization domain-like Superfamily: post-AAA+ oligomerization domain-like Family: DNA polymerase III clamp loader subunits, C-terminal domain
53	c1z05A	Alignment	not modelled	10.5	18	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator, rok family; PDBTitle: crystal structure of the rok family transcriptional regulator, homolog2 of e.coli mlc protein.
54	d1m4ka1	Alignment	not modelled	10.1	36	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: I set domains
55	c3r4rB	Alignment	not modelled	9.9	25	PDB header: cell adhesion Chain: B: PDB Molecule: hypothetical fimbrial assembly protein; PDBTitle: crystal structure of a hypothetical fimbrial assembly

					protein2 (bdi_3522) from parabacteroides distasonis atcc 8503 at 2.38 a3 resolution
56	d1z6ra3	Alignment	not modelled	9.9	14 Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
57	c3a4cA	Alignment	not modelled	9.7	16 PDB header: cell cycle, replication Chain: A: PDB Molecule: dna replication factor cdt1; PDBTitle: crystal structure of cdt1 c terminal domain
58	d1ex4a1	Alignment	not modelled	9.6	17 Fold: SH3-like barrel Superfamily: DNA-binding domain of retroviral integrase Family: DNA-binding domain of retroviral integrase
59	d1rp5a4	Alignment	not modelled	9.2	29 Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
60	d1vqqa3	Alignment	not modelled	9.2	31 Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
61	d2ayva1	Alignment	not modelled	8.8	23 Fold: UBC-like Superfamily: UBC-like Family: UBC-related
62	d3b5ha2	Alignment	not modelled	8.8	20 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: I set domains
63	d1z3da1	Alignment	not modelled	8.8	19 Fold: UBC-like Superfamily: UBC-like Family: UBC-related
64	c2rkka	Alignment	not modelled	8.7	19 PDB header: lipid transport Chain: A: PDB Molecule: vacuolar protein sorting-associated protein vta1; PDBTitle: crystal structure of s.cerevisiae vta1 n-terminal domain
65	d2zjrk1	Alignment	not modelled	8.5	18 Fold: Prokaryotic ribosomal protein L17 Superfamily: Prokaryotic ribosomal protein L17 Family: Prokaryotic ribosomal protein L17
66	d2ahme1	Alignment	not modelled	8.4	18 Fold: Coronavirus NSP8-like Superfamily: Coronavirus NSP8-like Family: Coronavirus NSP8-like
67	d1feua	Alignment	not modelled	8.4	20 Fold: Ribosomal protein L25-like Superfamily: Ribosomal protein L25-like Family: Ribosomal protein L25-like
68	c2pmzQ	Alignment	not modelled	8.4	27 PDB header: translation, transferase Chain: Q: PDB Molecule: dna-directed rna polymerase subunit a; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus
69	d2dl2a1	Alignment	not modelled	8.1	36 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: I set domains
70	d1kx5b	Alignment	not modelled	8.1	10 Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
71	d1y6la	Alignment	not modelled	8.0	17 Fold: UBC-like Superfamily: UBC-like Family: UBC-related
72	d1k38a	Alignment	not modelled	8.0	15 Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
73	c3eo3B	Alignment	not modelled	7.9	16 PDB header: isomerase, transferase Chain: B: PDB Molecule: bifunctional udp-n-acetylglucosamine 2-epimerase/n- PDBTitle: crystal structure of the n-acetylmannosamine kinase domain of human2 gne protein
74	c3ugfB	Alignment	not modelled	7.7	0 PDB header: transferase Chain: B: PDB Molecule: sucrose:(sucrose/fructan) 6-fructosyltransferase; PDBTitle: crystal structure of a 6-sst/6-sft from pachysandra terminalis
75	c3h1a	Alignment	not modelled	7.6	15 PDB header: proton transport Chain: A: PDB Molecule: flagellar motor switch protein flig; PDBTitle: the structure of full-length flig from aquifex aeolicus
76	c2ahmG	Alignment	not modelled	7.5	18 PDB header: viral protein, replication Chain: G: PDB Molecule: replicase polyprotein 1ab, heavy chain; PDBTitle: crystal structure of sars-cov super complex of non-structural2 proteins: the hexadecamer
77	d2huec1	Alignment	not modelled	7.4	10 Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
78	c2x48B	Alignment	not modelled	7.2	16 PDB header: viral protein Chain: B: PDB Molecule: cag38821; PDBTitle: orf 55 from sulfolobus islandicus rudivirus 1
79	d1k47a2	Alignment	not modelled	7.2	10 Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Phosphomevalonate kinase (PMK)
80	c3tixa	Alignment	not modelled	7.1	19 PDB header: gene regulation/protein binding Chain: A: PDB Molecule: ubiquitin-like protein smt3, rna-induced transcriptional PDBTitle: crystal structure of the chp1-tas3 complex core
81	c1mwuA	Alignment	not modelled	7.1	31 PDB header: biosynthetic protein Chain: A: PDB Molecule: penicillin-binding protein 2a; PDBTitle: structure of methicillin acyl-penicillin binding protein 2a2 from methicillin resistant staphylococcus aureus strain3 27r at 2.60 a resolution.

82	dlwlwe_	Alignment	not modelled	7.1	29	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Rad21/Rec8-like
83	clwlwF_	Alignment	not modelled	7.1	29	PDB header: cell adhesion Chain: F: PDB Molecule: sister chromatid cohesion protein 1; PDBTitle: sc smc1hd:scc1-c complex, atpgs
84	d2aaka_	Alignment	not modelled	7.0	15	Fold: UBC-like Superfamily: UBC-like Family: UBC-related
85	dlcg2a2	Alignment	not modelled	7.0	13	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
86	c2jtdA_	Alignment	not modelled	7.0	10	PDB header: cell adhesion Chain: A: PDB Molecule: myomesin-1; PDBTitle: skelemin immunoglobulin c2 like domain 4
87	dlqv9a_	Alignment	not modelled	7.0	35	Fold: H-NS histone-like proteins Superfamily: H-NS histone-like proteins Family: H-NS histone-like proteins
88	dlryqa_	Alignment	not modelled	6.9	42	Fold: Rubredoxin-like Superfamily: RNA polymerase subunits Family: RpoE2-like
89	d2ok3a1	Alignment	not modelled	6.9	24	Fold: Cyclophilin-like Superfamily: Cyclophilin-like Family: Cyclophilin (peptidylprolyl isomerase)
90	dlkgl_a	Alignment	not modelled	6.9	33	Fold: Necrosis inducing protein 1, NIP1 Superfamily: Necrosis inducing protein 1, NIP1 Family: Necrosis inducing protein 1, NIP1
91	c2z56B_	Alignment	not modelled	6.9	29	PDB header: hydrolase Chain: B: PDB Molecule: tk-subtilisin; PDBTitle: crystal structure of g56s-propeptide:s324a-subtilisin complex
92	c3oc2A_	Alignment	not modelled	6.8	19	PDB header: penicillin-binding protein Chain: A: PDB Molecule: penicillin-binding protein 3; PDBTitle: crystal structure of penicillin-binding protein 3 from pseudomonas2 aeruginosa
93	d2fnja1	Alignment	not modelled	6.8	18	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: SPRY domain
94	c2wadB_	Alignment	not modelled	6.7	18	PDB header: peptide binding protein Chain: B: PDB Molecule: penicillin-binding protein 2b; PDBTitle: penicillin-binding protein 2b (pbp-2b) from streptococcus2 pneumoniae (strain 5204)
95	d2f09a1	Alignment	not modelled	6.6	19	Fold: Streptavidin-like Superfamily: YdhA-like Family: YdhA-like
96	dlk25a4	Alignment	not modelled	6.5	29	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
97	dldfup_	Alignment	not modelled	6.5	9	Fold: Ribosomal protein L25-like Superfamily: Ribosomal protein L25-like Family: Ribosomal protein L25-like
98	d2z3qa1	Alignment	not modelled	6.4	28	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Short-chain cytokines
99	dlpyya4	Alignment	not modelled	6.4	29	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase