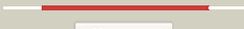
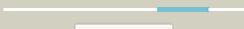
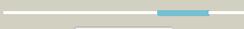
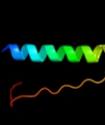
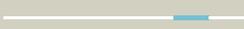
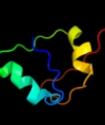
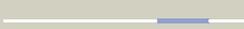
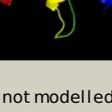


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P77433
Date	Thu Jan 5 12:29:16 GMT 2012
Unique Job ID	39c2cfbb9ccbced

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2g40a1	 Alignment		100.0	20	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: YkgG-like
2	c2g40A_	 Alignment		100.0	20	PDB header: unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of a duf162 family protein (dr_1909) from <i>Deinococcus radiodurans</i> at 1.70 Å resolution
3	d2g82a1	 Alignment		37.6	23	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
4	d1a5ta2	 Alignment		37.5	23	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
5	d2pkqo1	 Alignment		33.9	23	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
6	d1d2na_	 Alignment		33.1	24	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
7	c1a6cA_	 Alignment		30.7	26	PDB header: virus Chain: A: PDB Molecule: tobacco ringspot virus capsid protein; PDBTitle: structure of tobacco ringspot virus
8	d1i32a1	 Alignment		29.4	19	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
9	d1hdqo1	 Alignment		29.2	21	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
10	c2y7uM_	 Alignment		28.4	17	PDB header: virus Chain: M: PDB Molecule: coat protein; PDBTitle: x-ray structure of the grapevine fanleaf virus
11	c2qz4A_	 Alignment		27.9	13	PDB header: hydrolase Chain: A: PDB Molecule: paraplegin; PDBTitle: human paraplegin, aaa domain in complex with adp

12	d1vc2a1	Alignment		24.7	21	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
13	d1obfo1	Alignment		24.1	25	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
14	d3gpdg1	Alignment		23.6	26	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
15	d3cmco1	Alignment		21.7	26	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
16	c1nsfA	Alignment		20.7	24	PDB header: protein transport Chain: A: PDB Molecule: n-ethylmaleimide sensitive factor; PDBTitle: d2 hexamerization domain of n-ethylmaleimide sensitive factor (nsf)
17	d1u8fo1	Alignment		20.7	29	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
18	d1gado1	Alignment		20.6	14	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
19	d1nbwa3	Alignment		18.2	21	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ATPase domain of dehydratase reactivase alpha subunit
20	c3co5B	Alignment		17.9	8	PDB header: transcription regulator Chain: B: PDB Molecule: putative two-component system transcriptional response PDBTitle: crystal structure of sigma-54 interaction domain of putative2 transcriptional response regulator from neisseria gonorrhoeae
21	c2ce7B	Alignment	not modelled	17.8	22	PDB header: cell division protein Chain: B: PDB Molecule: cell division protein ftsh; PDBTitle: edta treated
22	d1j0xo1	Alignment	not modelled	17.4	29	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
23	d1rm4a1	Alignment	not modelled	17.1	21	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
24	c2z1dA	Alignment	not modelled	16.5	36	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
25	c1fnnB	Alignment	not modelled	16.4	14	PDB header: cell cycle Chain: B: PDB Molecule: cell division control protein 6; PDBTitle: crystal structure of cdc6p from pyrobaculum aerophilum
26	d1q5za	Alignment	not modelled	15.8	27	Fold: Invasion protein A (SipA) , C-terminal actin binding domain Superfamily: Invasion protein A (SipA) , C-terminal actin binding domain Family: Invasion protein A (SipA) , C-terminal actin binding domain
27	c1q5zA	Alignment	not modelled	15.8	27	PDB header: cell invasion Chain: A: PDB Molecule: sipa; PDBTitle: crystal structure of the c-terminal actin binding domain of2 salmonella invasion protein a (sipa)
28	d1k3ta1	Alignment	not modelled	15.7	23	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain

29	c3sggA	Alignment	not modelled	15.1	28	PDB header: hydrolase Chain: A: PDB Molecule: hypothetical hydrolase; PDBTitle: crystal structure of a hypothetical hydrolase (bt_2193) from2 bacteroides thetaiotaomicron vpi-5482 at 1.25 a resolution
30	c2dhrC	Alignment	not modelled	14.4	17	PDB header: hydrolase Chain: C: PDB Molecule: ftsh; PDBTitle: whole cytosolic region of atp-dependent metalloprotease2 ftsh (g3991)
31	c2c9oC	Alignment	not modelled	13.4	14	PDB header: hydrolase Chain: C: PDB Molecule: ruvb-like 1; PDBTitle: 3d structure of the human ruvb-like helicase ruvb1
32	c3l7oB	Alignment	not modelled	13.3	13	PDB header: isomerase Chain: B: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from streptococcus2 mutans ua159
33	d1in4a2	Alignment	not modelled	12.8	8	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
34	c3b9pA	Alignment	not modelled	12.7	14	PDB header: hydrolase Chain: A: PDB Molecule: cg5977-pa, isoform a; PDBTitle: spastin
35	c3u7jA	Alignment	not modelled	12.5	16	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from burkholderia2 thailandensis
36	c1xwiA	Alignment	not modelled	12.5	14	PDB header: protein transport Chain: A: PDB Molecule: skd1 protein; PDBTitle: crystal structure of vps4b
37	d1sxje2	Alignment	not modelled	12.3	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
38	d2joya1	Alignment	not modelled	12.2	14	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: Ribosomal protein L14e
39	d1v5wa	Alignment	not modelled	12.2	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
40	c3u5cG	Alignment	not modelled	12.1	22	PDB header: ribosome Chain: G: PDB Molecule: 40s ribosomal protein s6-a; PDBTitle: the structure of the eukaryotic ribosome at 3.0 a resolution
41	d2b4ro1	Alignment	not modelled	11.5	19	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
42	c1jr3E	Alignment	not modelled	11.2	29	PDB header: transferase Chain: E: PDB Molecule: dna polymerase iii, delta' subunit; PDBTitle: crystal structure of the processivity clamp loader gamma2 complex of e. coli dna polymerase iii
43	d1njfa	Alignment	not modelled	11.1	12	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
44	d1ggaa1	Alignment	not modelled	11.1	21	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
45	c1w5sB	Alignment	not modelled	11.0	13	PDB header: replication Chain: B: PDB Molecule: origin recognition complex subunit 2 orc2; PDBTitle: structure of the aeropyrum pernix orc2 protein (adp form)
46	d2pl1a1	Alignment	not modelled	10.8	11	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
47	c2xznY	Alignment	not modelled	10.5	17	PDB header: ribosome Chain: Y: PDB Molecule: rps6e; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2
48	c1ahuB	Alignment	not modelled	10.4	15	PDB header: flavoenzyme Chain: B: PDB Molecule: vanillyl-alcohol oxidase; PDBTitle: structure of the octameric flavoenzyme vanillyl-alcohol2 oxidase in complex with p-cresol
49	c1l6jA	Alignment	not modelled	10.4	27	PDB header: hydrolase Chain: A: PDB Molecule: matrix metalloproteinase-9; PDBTitle: crystal structure of human matrix metalloproteinase mmp92 (gelatinase b).
50	c2r65A	Alignment	not modelled	9.8	12	PDB header: hydrolase Chain: A: PDB Molecule: cell division protease ftsh homolog; PDBTitle: crystal structure of helicobacter pylori atp dependent protease, ftsh2 adp complex
51	d1t9ka	Alignment	not modelled	8.9	13	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
52	c2kyrA	Alignment	not modelled	8.8	15	PDB header: transferase Chain: A: PDB Molecule: fructose-like phosphotransferase enzyme iib component 1; PDBTitle: solution structure of enzyme iib subunit of pts system from2 escherichia coli k12. northeast structural genomics consortium target3 er315/ontario center for structural proteomics target ec0544
53	d2r48a1	Alignment	not modelled	8.7	8	Fold: Phosphotyrosine protein phosphatases I-like Superfamily: PTS system IIB component-like Family: PTS system, Fructose specific IIB subunit-like
						PDB header: dna binding protein

54	c3cnbC	Alignment	not modelled	8.7	7	Chain: C: PDB Molecule: dna-binding response regulator, merr family; PDBTitle: crystal structure of signal receiver domain of dna binding response2 regulator protein (merr) from colwellia psycherythraea 34h
55	d2a9sa1	Alignment	not modelled	8.4	11	Fold: Anticodon-binding domain-like Superfamily: CinA-like Family: CinA-like
56	c2zayA	Alignment	not modelled	8.3	14	PDB header: signaling protein Chain: A: PDB Molecule: response regulator receiver protein; PDBTitle: crystal structure of response regulator from desulfuromonas2 acetoxidans
57	d1u0sy	Alignment	not modelled	8.3	7	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
58	d1r7ra3	Alignment	not modelled	8.1	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
59	c3eulB	Alignment	not modelled	8.1	20	PDB header: transcription Chain: B: PDB Molecule: possible nitrate/nitrite response transcriptional PDBTitle: structure of the signal receiver domain of the putative2 response regulator narI from mycobacterium tuberculosis
60	c3d8bB	Alignment	not modelled	8.1	17	PDB header: hydrolase Chain: B: PDB Molecule: fidgetin-like protein 1; PDBTitle: crystal structure of human fidgetin-like protein 1 in complex with adp
61	c2j17A	Alignment	not modelled	7.6	20	PDB header: hydrolase Chain: A: PDB Molecule: tyrosine-protein phosphatase yil113w; PDBTitle: ptyr bound form of sdp-1
62	c3q3qA	Alignment	not modelled	7.3	13	PDB header: hydrolase Chain: A: PDB Molecule: alkaline phosphatase; PDBTitle: crystal structure of spap: an novel alkaline phosphatase from2 bacterium sphingomonas sp. strain bsar-1
63	c3s93B	Alignment	not modelled	7.3	7	PDB header: transcription Chain: B: PDB Molecule: tudor domain-containing protein 5; PDBTitle: crystal structure of conserved motif in tdrd5
64	d1biaa2	Alignment	not modelled	7.3	14	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: Biotin repressor (BirA)
65	d1qvra3	Alignment	not modelled	7.2	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
66	d1izca	Alignment	not modelled	7.1	11	Fold: TIM beta/alpha-barrel Superfamily: Phosphoenolpyruvate/pyruvate domain Family: HpcH/Hpal aldolase
67	c1izcA	Alignment	not modelled	7.1	11	PDB header: lyase Chain: A: PDB Molecule: macrophomate synthase intermolecular diels-alderase; PDBTitle: crystal structure analysis of macrophomate synthase
68	d1r6bx3	Alignment	not modelled	7.1	10	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
69	d1p2fa2	Alignment	not modelled	7.1	12	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
70	d1sp8a1	Alignment	not modelled	6.9	12	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradiol dioxygenases
71	d1lv7a	Alignment	not modelled	6.9	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
72	c1eakA	Alignment	not modelled	6.7	18	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: 72 kda type iv collagenase; PDBTitle: catalytic domain of prommp-2 e404q mutant
73	d2ce7a2	Alignment	not modelled	6.6	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
74	c1nbwA	Alignment	not modelled	6.5	20	PDB header: hydrolase Chain: A: PDB Molecule: glycerol dehydratase reactivase alpha subunit; PDBTitle: glycerol dehydratase reactivase
75	c3eihB	Alignment	not modelled	6.5	14	PDB header: protein transport Chain: B: PDB Molecule: vacuolar protein sorting-associated protein 4; PDBTitle: crystal structure of s.cerevisiae vps4 in the presence of atpgammas
76	d1fnna2	Alignment	not modelled	6.3	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
77	d1zesal	Alignment	not modelled	6.2	11	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
78	d1sqia1	Alignment	not modelled	6.2	10	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradiol dioxygenases PDB header: oxidoreductase

79	c3ecjC_	Alignment	not modelled	6.1	38	Chain: C: PDB Molecule: protein (homoprotocatechuate 2,3-dioxygenase); PDBTitle: structure of e323l mutant of homoprotocatechuate 2,3-dioxygenase from2 brevibacterium fuscum at 1.65a resolution
80	c3b8iF_	Alignment	not modelled	6.1	21	PDB header: lyase Chain: F: PDB Molecule: pa4872 oxaloacetate decarboxylase; PDBTitle: crystal structure of oxaloacetate decarboxylase from pseudomonas2 aeruginosa (pa4872) in complex with oxalate and mg2+.
81	c3iuyB_	Alignment	not modelled	6.1	18	PDB header: hydrolase Chain: B: PDB Molecule: probable atp-dependent rna helicase ddx53; PDBTitle: crystal structure of ddx53 dead-box domain
82	d1e94e_	Alignment	not modelled	5.9	38	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
83	d1stza2	Alignment	not modelled	5.7	11	Fold: Profilin-like Superfamily: GAF domain-like Family: HrcA C-terminal domain-like
84	d2d0oa3	Alignment	not modelled	5.6	20	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ATPase domain of dehydratase reactivase alpha subunit
85	c4a1dE_	Alignment	not modelled	5.6	25	PDB header: ribosome Chain: E: PDB Molecule: rpl6; PDBTitle: t.thermophila 60s ribosomal subunit in complex with initiation2 factor 6. this file contains 26s rrna and proteins of3 molecule 4.
86	c3izcG_	Alignment	not modelled	5.3	36	PDB header: ribosome Chain: G: PDB Molecule: 60s ribosomal protein rpl6 (l6e); PDBTitle: localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
87	d1s8na_	Alignment	not modelled	5.3	13	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
88	c2yvka_	Alignment	not modelled	5.2	12	PDB header: isomerase Chain: A: PDB Molecule: methylthioribose-1-phosphate isomerase; PDBTitle: crystal structure of 5-methylthioribose 1-phosphate2 isomerase product complex from bacillus subtilis
89	d1g6oa_	Alignment	not modelled	5.2	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
90	c2f6rA_	Alignment	not modelled	5.2	14	PDB header: transferase Chain: A: PDB Molecule: bifunctional coenzyme a synthase; PDBTitle: crystal structure of bifunctional coenzyme a synthase (coa synthase):2 (18044849) from mus musculus at 1.70 a resolution
91	d1sp8a2	Alignment	not modelled	5.1	11	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Extradiol dioxygenases