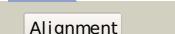
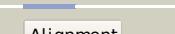
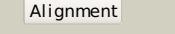
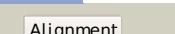


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0A8B5
Date	Thu Jan 5 11:07:23 GMT 2012
Unique Job ID	765cd998c5361baa

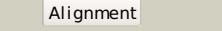
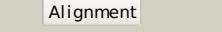
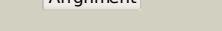
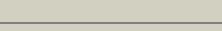
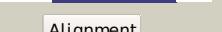
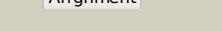
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1puga_			99.9	100	Fold: YbaB-like Superfamily: YbaB-like Family: YbaB-like
2	d1j8ba_			99.9	82	Fold: YbaB-like Superfamily: YbaB-like Family: YbaB-like
3	c1ybxA_			99.9	33	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: conserved hypothetical protein cth-383 from clostridium thermocellum
4	c3f42A_			99.9	26	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein hp0035; PDBTitle: crystal structure of uncharacterized protein hp0035 from helicobacter2 pylori
5	d1pugb_			99.7	100	Fold: YbaB-like Superfamily: YbaB-like Family: YbaB-like
6	d1lr0a_			78.2	11	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TolA
7	d2ba0g2			74.0	18	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
8	c2x9ab_			67.8	17	PDB header: viral protein Chain: B: PDB Molecule: membrane spanning protein, required for outer membrane PDBTitle: crystal structure of g3p from phage if1 in complex with its2 coreceptor, the c-terminal domain of tolA
9	d2nn6c2			64.4	9	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
10	d1tola2			61.1	17	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TolA
11	d2nn6e2			51.2	7	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like

12	d2je6a2			48.6	9	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
13	d2nn6a2			46.4	15	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
14	c1xx3A_			46.3	21	PDB header: transport protein Chain: A: PDB Molecule: tonb protein; PDBTitle: solution structure of escherichia coli tonb-ctd
15	c2v4uA_			41.9	12	PDB header: ligase Chain: A: PDB Molecule: ctp synthase 2; PDBTitle: human ctp synthetase 2 - glutaminase domain in complex with 2 5-oxo-l-norleucine
16	c3brca_			38.6	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein of unknown function; PDBTitle: crystal structure of a conserved protein of unknown function from2 methanobacterium thermoautotrophicum
17	d1oysa2			36.3	13	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
18	d2gskb1			30.7	21	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TonB
19	c3h7fB_			30.0	13	PDB header: transferase Chain: B: PDB Molecule: serine hydroxymethyltransferase 1; PDBTitle: crystal structure of serine hydroxymethyltransferase from2 mycobacterium tuberculosis
20	d1u07a_			27.9	21	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TonB
21	c2boiA_		not modelled	26.8	24	PDB header: lectin Chain: A: PDB Molecule: cv-ii lectin; PDBTitle: 1.1a structure of chromobacterium violaceum lectin cv1 in2 complex with alpha-methyl-fucoside
22	d2chha1		not modelled	26.4	16	Fold: Calcium-mediated lectin Superfamily: Calcium-mediated lectin Family: Calcium-mediated lectin
23	c2vnvC_		not modelled	26.4	21	PDB header: sugar-binding protein Chain: C: PDB Molecule: bcla; PDBTitle: crystal structure of bcla lectin from burkholderia2 cenocepacia in complex with alpha-methyl-mannoside at 1.73 angstrom resolution
24	d1uzva_		not modelled	24.1	20	Fold: Calcium-mediated lectin Superfamily: Calcium-mediated lectin Family: Calcium-mediated lectin
25	c2grxC_		not modelled	23.8	21	PDB header: metal transport Chain: C: PDB Molecule: protein tonb; PDBTitle: crystal structure of tonb in complex with fhua, e. coli2 outer membrane receptor for ferrichrome
26	d1ib8a2		not modelled	23.7	8	Fold: Alpha-lytic protease prodomain-like Superfamily: YhbC-like, N-terminal domain Family: YhbC-like, N-terminal domain
27	c1udsA_		not modelled	22.1	13	PDB header: transferase Chain: A: PDB Molecule: ribonuclease ph; PDBTitle: crystal structure of the trna processing enzyme rnase ph r126a mutant2 from aquifex aeolicus
28	c2xr4A_		not modelled	22.1	24	PDB header: sugar binding protein Chain: A: PDB Molecule: lectin; PDBTitle: c-terminal domain of bc2l-c lectin from burkholderia cenocepacia

29	c2kzxA		Alignment	not modelled	21.9	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of a3dh5 from clostridium thermocellum,2 northeast structural genomics consortium target cmr116
30	c3nvaB		Alignment	not modelled	21.6	21	PDB header: ligase Chain: B: PDB Molecule: ctp synthase; PDBTitle: dimeric form of ctp synthase from sulfobolus solfataricus
31	c3b4tC		Alignment	not modelled	21.5	6	PDB header: transferase Chain: C: PDB Molecule: ribonuclease ph; PDBTitle: crystal structure of mycobacterium tuberculosis rna ph, the2 mycobacterium tuberculosis structural genomics consortium target3 rv1340
32	c3o6uB		Alignment	not modelled	20.7	10	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein cpe2226; PDBTitle: crystal structure of cpe2226 protein from clostridium perfringens,2 northeast structural genomics consortium target cpr195
33	c2b1kA		Alignment	not modelled	20.7	11	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbe; PDBTitle: crystal structure of e. coli ccmg protein
34	c2npbA		Alignment	not modelled	20.4	24	PDB header: oxidoreductase Chain: A: PDB Molecule: selenoprotein w; PDBTitle: nmr solution structure of mouse selw
35	c2k9kA		Alignment	not modelled	20.3	12	PDB header: metal transport Chain: A: PDB Molecule: tonb2; PDBTitle: molecular characterization of the tonb2 protein from vibrio2 anguillarum
36	c2owyB		Alignment	not modelled	19.8	12	PDB header: dna binding protein Chain: B: PDB Molecule: recombination-associated protein rdgc; PDBTitle: the recombination-associated protein rdgc adopts a novel toroidal2 architecture for dna binding
37	c1ib8A		Alignment	not modelled	18.4	8	PDB header: nucleic acid binding protein Chain: A: PDB Molecule: conserved protein sp14..3; PDBTitle: solution structure and function of a conserved protein2 sp14..3 encoded by an essential streptococcus pneumoniae3 gene
38	c3eytA		Alignment	not modelled	17.8	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein spoa0173; PDBTitle: crystal structure of thioredoxin-like superfamily protein spoa0173
39	c3dd6A		Alignment	not modelled	17.4	20	PDB header: transferase Chain: A: PDB Molecule: ribonuclease ph; PDBTitle: crystal structure of rph, an exoribonuclease from bacillus2 anthracis at 1.7 a resolution
40	d2fqla1		Alignment	not modelled	16.7	10	Fold: N domain of copper amine oxidase-like Superfamily: Frataxin/Nqo15-like Family: Frataxin-like
41	d1ihra		Alignment	not modelled	16.3	24	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TonB
42	d2ga5a1		Alignment	not modelled	16.0	10	Fold: N domain of copper amine oxidase-like Superfamily: Frataxin/Nqo15-like Family: Frataxin-like
43	c2pnzB		Alignment	not modelled	15.9	18	PDB header: hydrolase/hydrolase Chain: B: PDB Molecule: probable exosome complex exonuclease 2; PDBTitle: crystal structure of the p. abyssi exosome rna ph ring2 complexed with udp and gmp
44	c1r6mA		Alignment	not modelled	15.7	11	PDB header: transferase Chain: A: PDB Molecule: ribonuclease ph; PDBTitle: crystal structure of the tRNA processing enzyme rna ph from2 pseudomonas aeruginosa in complex with phosphate
45	d1e2ya		Alignment	not modelled	15.2	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
46	c1x2gB		Alignment	not modelled	14.3	14	PDB header: ligase Chain: B: PDB Molecule: lipoate-protein ligase a; PDBTitle: crystal structure of lipoate-protein ligase a from2 escherichia coli
47	c2nn6C		Alignment	not modelled	14.1	11	PDB header: hydrolase/transferase Chain: C: PDB Molecule: exosome complex exonuclease rrp43; PDBTitle: structure of the human rna exosome composed of rrp41, rrp45,2 rrp46, rrp43, mtr3, rrp42, cs14, rrp4, and rrp40
48	d1neia		Alignment	not modelled	13.6	18	Fold: Hypothetical protein YoaG Superfamily: Hypothetical protein YoaG Family: Hypothetical protein YoaG
49	c2nn6E		Alignment	not modelled	12.4	5	PDB header: hydrolase/transferase Chain: E: PDB Molecule: exosome complex exonuclease rrp42; PDBTitle: structure of the human rna exosome composed of rrp41, rrp45,2 rrp46, rrp43, mtr3, rrp42, cs14, rrp4, and rrp40
50	c1vqzA		Alignment	not modelled	12.0	19	PDB header: ligase Chain: A: PDB Molecule: lipoate-protein ligase, putative; PDBTitle: crystal structure of a putative lipoate-protein ligase a (sp_1160)2 from streptococcus pneumoniae tigr4 at 1.99 a resolution
51	d1vqza1		Alignment	not modelled	12.0	18	Fold: SufE/NifU Superfamily: SufE/NifU Family: SP1160 C-terminal domain-like
52	c2z7eB		Alignment	not modelled	11.1	8	PDB header: biosynthetic protein Chain: B: PDB Molecule: nifU-like protein; PDBTitle: crystal structure of aquifex aeolicus iscu with bound [2fe-2 2s] cluster
53	c2qzbB		Alignment	not modelled	10.8	23	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein yfey; PDBTitle: crystal structure of the uncharacterized protein yfey from escherichia2 coli
							PDB header: hydrolase

54	c2wnrC	Alignment	not modelled	9.8	9	Chain: C: PDB Molecule: probable exosome complex exonuclease 2; PDBTitle: the structure of methanothermobacter thermoautotrophicus2 exosome core assembly
55	c2wp8A	Alignment	not modelled	9.7	16	PDB header: hydrolase Chain: A: PDB Molecule: exosome complex component rrp45; PDBTitle: yeast rrp44 nuclease
56	d1xvqa	Alignment	not modelled	9.3	21	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
57	d1we0a1	Alignment	not modelled	9.2	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
58	c2vzkD	Alignment	not modelled	8.7	23	PDB header: transferase Chain: D: PDB Molecule: glutamate n-acetyltransferase 2 beta chain; PDBTitle: structure of the acyl-enzyme complex of an n-terminal2 nucleophile (ntn) hydrolase, oat2
59	c1vraB	Alignment	not modelled	8.7	26	PDB header: transferase Chain: B: PDB Molecule: arginine biosynthesis bifunctional protein argj; PDBTitle: crystal structure of arginine biosynthesis bifunctional protein argj2 (10175521) from bacillus halodurans at 2.00 a resolution
60	c2ad5B	Alignment	not modelled	8.0	27	PDB header: ligase Chain: B: PDB Molecule: cpt synthase; PDBTitle: mechanisms of feedback regulation and drug resistance of cpt2 synthetases: structure of the e. coli ctps/cpt complex at 2.8-3 angstrom resolution.
61	d1zofa1	Alignment	not modelled	8.0	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
62	c1zyeL	Alignment	not modelled	7.8	15	PDB header: oxidoreductase Chain: L: PDB Molecule: thioredoxin-dependent peroxide reductase; PDBTitle: crystal strucuture analysis of bovine mitochondrial peroxiredoxin iii
63	d2cv4a1	Alignment	not modelled	7.8	15	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
64	c3fw2A	Alignment	not modelled	7.7	16	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol-disulfide oxidoreductase; PDBTitle: c-terminal domain of putative thiol-disulfide oxidoreductase from2 bacteroides thetaiotaomicron.
65	c1jcgA	Alignment	not modelled	7.5	8	PDB header: structural protein Chain: A: PDB Molecule: rod shape-determining protein mreb; PDBTitle: mreb from thermotoga maritima, amppnp
66	c3uowB	Alignment	not modelled	7.3	19	PDB header: ligase Chain: B: PDB Molecule: gmp synthetase; PDBTitle: crystal structure of pf10_0123, a gmp synthetase from plasmodium2 falciparum
67	c1s94A	Alignment	not modelled	7.3	11	PDB header: endocytosis/exocytosis Chain: A: PDB Molecule: s-syntaxin; PDBTitle: crystal structure of the habc domain of neuronal syntaxin from2 squid oligo pealei
68	d1s94a	Alignment	not modelled	7.3	11	Fold: STAT-like Superfamily: t-snare proteins Family: t-snare proteins
69	d1k28d2	Alignment	not modelled	7.1	38	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
70	c3h2dA	Alignment	not modelled	7.1	12	PDB header: signaling protein Chain: A: PDB Molecule: chec-like superfamily protein; PDBTitle: crystal structure of a chemotactic chec-like protein (so_3915) from2 shewanella oneidensis mr-1 at 1.86 a resolution
71	c2bmxB	Alignment	not modelled	7.1	6	PDB header: oxidoreductase Chain: B: PDB Molecule: alkyl hydroperoxidase c; PDBTitle: mycobacterium tuberculosis ahpc
72	d1m98a2	Alignment	not modelled	7.1	29	Fold: Cystatin-like Superfamily: NTF2-like Family: Orange carotenoid protein, C-terminal domain
73	c3lorB	Alignment	not modelled	6.8	15	PDB header: isomerase Chain: B: PDB Molecule: thiol-disulfide isomerase and thioredoxins; PDBTitle: the crystal structure of a thiol-disulfide isomerase from2 corynebacterium glutamicum to 2.2a
74	d2r7ka2	Alignment	not modelled	6.7	16	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: PurP ATP-binding domain-like
75	d1z5ye1	Alignment	not modelled	6.7	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
76	c1tolA	Alignment	not modelled	6.7	14	PDB header: viral protein Chain: A: PDB Molecule: protein (fusion protein consisting of minor coat PDBTitle: fusion of n-terminal domain of the minor coat protein from2 gene iii in phage m13, and c-terminal domain of e. coli3 protein-tola
77	d1n8ja	Alignment	not modelled	6.6	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
78	d3cdxa1	Alignment	not modelled	6.6	7	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like

79	c3ghhA_		Alignment	not modelled	6.5	40	PDB header: hydrolase Chain: A: PDB Molecule: ecto-nad+ glycohydrolase (cd38 molecule); PDBTitle: structural insights into the catalytic mechanism of cd38:2 evidence for a conformationally flexible covalent enzyme-3 substrate complex.
80	c3eukC_		Alignment	not modelled	6.4	13	PDB header: cell cycle Chain: C: PDB Molecule: chromosome partition protein mukb, linker; PDBTitle: crystal structure of muke-mukf(residues 292-443)-mukb(head2 domain)-atpgamma complex, asymmetric dimer
81	c3kebB_		Alignment	not modelled	6.3	15	PDB header: oxidoreductase Chain: B: PDB Molecule: probable thiol peroxidase; PDBTitle: thiol peroxidase from chromobacterium violaceum
82	c2kxxA_		Alignment	not modelled	6.2	20	PDB header: protein binding Chain: A: PDB Molecule: small protein a; PDBTitle: nmr structure of escherichia coli bame, a lipoprotein component of the2 beta-barrel assembly machinery complex
83	d1x2ga1		Alignment	not modelled	6.2	13	Fold: SufE/NifU Superfamily: SufE/NifU Family: SP1160 C-terminal domain-like
84	d1knga_		Alignment	not modelled	5.9	6	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
85	c3mxnA_		Alignment	not modelled	5.9	20	PDB header: replication Chain: A: PDB Molecule: recq-mediated genome instability protein 1; PDBTitle: crystal structure of the rmi core complex
86	c2br2G_		Alignment	not modelled	5.8	9	PDB header: hydrolase Chain: G: PDB Molecule: exosome complex exonuclease 2; PDBTitle: rnase ph core of the archaeal exosome
87	d1yexa1		Alignment	not modelled	5.8	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
88	c3it4B_		Alignment	not modelled	5.7	26	PDB header: transferase Chain: B: PDB Molecule: arginine biosynthesis bifunctional protein argi PDBTitle: the crystal structure of ornithine acetyltransferase from2 mycobacterium tuberculosis (rv1653) at 1.7 a
89	d1qmva_		Alignment	not modelled	5.7	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
90	d1l4sa_		Alignment	not modelled	5.7	7	Fold: Ribosome binding protein Y (YfiA homologue) Superfamily: Ribosome binding protein Y (YfiA homologue) Family: Ribosome binding protein Y (YfiA homologue)
91	c3fw6A_		Alignment	not modelled	5.5	15	PDB header: hydrolase Chain: A: PDB Molecule: cellulase; PDBTitle: crystal structure of celm2, a bifunctional glucanase-2 xylanase protein from a metagenome library
92	d1yuwa1		Alignment	not modelled	5.2	20	Fold: Heat shock protein 70kD (HSP70), peptide-binding domain Superfamily: Heat shock protein 70kD (HSP70), peptide-binding domain Family: Heat shock protein 70kD (HSP70), peptide-binding domain
93	d1kn0a_		Alignment	not modelled	5.1	23	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: The homologous-pairing domain of Rad52 recombinase