
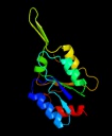














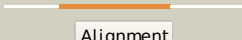

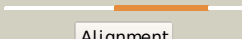

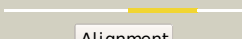



Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	Q9JMR6
Date	Thu Jan 5 12:37:50 GMT 2012
Unique Job ID	6e7a4450c3df15c1

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3h16A_	 Alignment		97.4	18	PDB header: signaling protein Chain: A: PDB Molecule: tir protein; PDBTitle: crystal structure of a bacteria tir domain, pdtir from2 paracoccus denitrificans
2	d1fyva_	 Alignment		97.2	16	Fold: Flavodoxin-like Superfamily: Toll/Interleukin receptor TIR domain Family: Toll/Interleukin receptor TIR domain
3	c2y92A_	 Alignment		97.0	17	PDB header: immune system Chain: A: PDB Molecule: toll/interleukin-1 receptor domain-containing adaptor PDBTitle: crystal structure of mal adaptor protein
4	c2z5vA_	 Alignment		97.0	12	PDB header: immune system Chain: A: PDB Molecule: myeloid differentiation primary response protein PDBTitle: solution structure of the tir domain of human myd88
5	c1t3gB_	 Alignment		95.9	15	PDB header: membrane protein Chain: B: PDB Molecule: x-linked interleukin-1 receptor accessory PDBTitle: crystal structure of the toll/interleukin-1 receptor (tir)2 domain of human il-1rapl
6	d1fyxa_	 Alignment		95.0	10	Fold: Flavodoxin-like Superfamily: Toll/Interleukin receptor TIR domain Family: Toll/Interleukin receptor TIR domain
7	c3oziB_	 Alignment		94.2	5	PDB header: plant protein Chain: B: PDB Molecule: l6tr; PDBTitle: crystal structure of the tir domain from the flax disease resistance2 protein l6
8	d2f62a1	 Alignment		84.9	16	Fold: Flavodoxin-like Superfamily: N-(deoxy)ribosyltransferase-like Family: N-deoxyribosyltransferase
9	d1m1nb_	 Alignment		84.3	19	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
10	c2khzB_	 Alignment		82.7	24	PDB header: nuclear protein Chain: B: PDB Molecule: c-myc-responsive protein rcl; PDBTitle: solution structure of rcl
11	c2i34B_	 Alignment		77.0	15	PDB header: hydrolase Chain: B: PDB Molecule: acid phosphatase; PDBTitle: the crystal structure of class c acid phosphatase from bacillus2 anthracis with tungstate bound

12	d1qh8b_	Alignment		76.0	13	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
13	d1miob_	Alignment		60.4	18	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
14	d1wdka3	Alignment		50.4	16	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
15	c3pdiB_	Alignment		47.5	12	PDB header: protein binding Chain: B: PDB Molecule: nitrogenase mofe cofactor biosynthesis protein nifn; PDBTitle: precursor bound nifen
16	d2i7xa1	Alignment		46.3	17	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: beta-CASP RNA-metabolising hydrolases
17	c2i7xA_	Alignment		46.3	17	PDB header: rna binding protein, protein binding Chain: A: PDB Molecule: protein cft2; PDBTitle: structure of yeast cpsf-100 (ydh1p)
18	c3pdiG_	Alignment		45.7	7	PDB header: protein binding Chain: G: PDB Molecule: nitrogenase mofe cofactor biosynthesis protein nife; PDBTitle: precursor bound nifen
19	c3kbaA_	Alignment		43.4	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein ta0487; PDBTitle: the crystal structure of the protein cina with unknown function from2 thermoplasma acidophilum
20	c2xr1B_	Alignment		43.3	15	PDB header: hydrolase Chain: B: PDB Molecule: cleavage and polyadenylation specificity factor 100 kd PDBTitle: dimeric archaeal cleavage and polyadenylation specificity2 factor with n-terminal kh domains (kh-cpsf) from methanosarcina3 mazei
21	c3jrnA_	Alignment	not modelled	39.2	13	PDB header: plant protein Chain: A: PDB Molecule: at1g72930 protein; PDBTitle: crystal structure of tir domain from arabidopsis thaliana
22	d2d81a1	Alignment	not modelled	39.2	13	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: PHB depolymerase-like
23	c2ycbA_	Alignment	not modelled	38.7	22	PDB header: hydrolase Chain: A: PDB Molecule: cleavage and polyadenylation specificity factor; PDBTitle: structure of the archaeal beta-casp protein with n-terminal2 kh domains from methanothermobacter thermautotrophicus
24	d1jq5a_	Alignment	not modelled	36.8	14	Fold: Dehydroquinase synthase-like Superfamily: Dehydroquinase synthase-like Family: Iron-containing alcohol dehydrogenase
25	c3sirD_	Alignment	not modelled	34.6	20	PDB header: hydrolase Chain: D: PDB Molecule: caspace; PDBTitle: crystal structure of drice
26	c3ox4D_	Alignment	not modelled	33.9	15	PDB header: oxidoreductase Chain: D: PDB Molecule: alcohol dehydrogenase 2; PDBTitle: structures of iron-dependent alcohol dehydrogenase 2 from zymomonas2 mobilis zm4 complexed with nad cofactor
27	d2dkfa1	Alignment	not modelled	33.6	19	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: beta-CASP RNA-metabolising hydrolases
28	c3et4A_	Alignment	not modelled	32.5	20	PDB header: hydrolase Chain: A: PDB Molecule: outer membrane protein p4, nadp phosphatase; PDBTitle: structure of recombinant haemophilus influenzae e(p4)

						acid phosphatase
29	c2xr1A	Alignment	not modelled	31.9	15	PDB header: hydrolase Chain: A: PDB Molecule: cleavage and polyadenylation specificity factor 100 kd PDBTitle: dimeric archaeal cleavage and polyadenylation specificity2 factor with n-terminal kh domains (kh-cpsf) from methanosarcina3 mazei
30	d1ycga1	Alignment	not modelled	30.9	16	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
31	d2i52a1	Alignment	not modelled	30.6	27	Fold: MK0786-like Superfamily: MK0786-like Family: MK0786-like
32	d2ieca1	Alignment	not modelled	30.0	27	Fold: MK0786-like Superfamily: MK0786-like Family: MK0786-like
33	c2ogfD	Alignment	not modelled	29.5	33	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: hypothetical protein mj0408; PDBTitle: crystal structure of protein mj0408 from methanococcus jannaschii,2 pfam duf372
34	d2obba1	Alignment	not modelled	27.3	11	Fold: HAD-like Superfamily: HAD-like Family: BT0820-like
35	d1u0sy	Alignment	not modelled	26.1	11	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
36	c3pctA	Alignment	not modelled	25.3	15	PDB header: hydrolase Chain: A: PDB Molecule: class c acid phosphatase; PDBTitle: structure of the class c acid phosphatase from pasteurilla multocida
37	c2ia5C	Alignment	not modelled	23.6	21	PDB header: transferase Chain: C: PDB Molecule: polynucleotide kinase; PDBTitle: t4 polynucleotide kinase/phosphatase with bound sulfate and2 magnesium.
38	d1ltqa1	Alignment	not modelled	23.3	21	Fold: HAD-like Superfamily: HAD-like Family: phosphatase domain of polynucleotide kinase
39	d2b82a1	Alignment	not modelled	22.4	19	Fold: HAD-like Superfamily: HAD-like Family: Class B acid phosphatase, AphA
40	c1tjnA	Alignment	not modelled	22.3	18	PDB header: lyase Chain: A: PDB Molecule: sirohydrochlorin cobaltochelate; PDBTitle: crystal structure of hypothetical protein af0721 from archaeoglobus2 fulgidus
41	d1tjna	Alignment	not modelled	22.3	18	Fold: Chelatase-like Superfamily: Chelatase Family: CbiX-like
42	c3ehdA	Alignment	not modelled	21.5	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized conserved protein; PDBTitle: crystal structure of conserved protein from enterococcus faecalis v583
43	d1uxoa	Alignment	not modelled	21.1	13	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: YdeN-like
44	c3af5A	Alignment	not modelled	20.9	27	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein ph1404; PDBTitle: the crystal structure of an archaeal cpsf subunit, ph1404 from2 pyrococcus horikoshii
45	c2ofhX	Alignment	not modelled	20.0	17	PDB header: hydrolase, membrane protein Chain: X: PDB Molecule: zinc-transporting atpase; PDBTitle: solution structure of the n-terminal domain of the zinc(ii) atpase2 ziaa in its apo form
46	c2xdqB	Alignment	not modelled	19.6	10	PDB header: oxidoreductase Chain: B: PDB Molecule: light-independent protochlorophyllide reductase subunit b; PDBTitle: dark operative protochlorophyllide oxidoreductase (chlN-2 chlB)2 complex
47	c2kbzA	Alignment	not modelled	18.9	25	PDB header: viral protein Chain: A: PDB Molecule: 15 protein (bacteriophage spp1 complete PDBTitle: nmr structure of protein gp15 of bacteriophage spp1
48	d1f8ya	Alignment	not modelled	17.1	21	Fold: Flavodoxin-like Superfamily: N-(deoxy)riboseyltransferase-like Family: N-(deoxy)riboseyltransferase
49	d1vh3a	Alignment	not modelled	17.0	16	Fold: Nucleotide-di-phospho-sugar transferases Superfamily: Nucleotide-di-phospho-sugar transferases Family: Cytidylyltransferase
50	c3bfjK	Alignment	not modelled	17.0	19	PDB header: oxidoreductase Chain: K: PDB Molecule: 1,3-propanediol oxidoreductase; PDBTitle: crystal structure analysis of 1,3-propanediol oxidoreductase
51	c3lyhB	Alignment	not modelled	16.8	11	PDB header: lyase Chain: B: PDB Molecule: cobalamin (vitamin b12) biosynthesis cbix protein; PDBTitle: crystal structure of putative cobalamin (vitamin b12) biosynthesis2 cbix protein (yp_958415.1) from marinobacter aquaeolei vt8 at 1.60 a3 resolution
52	d2d9ia1	Alignment	not modelled	16.3	5	Fold: IF3-like Superfamily: SMR domain-like Family: Smr domain
53	d1vlja	Alignment	not modelled	15.9	17	Fold: Dehydroquinase synthase-like Superfamily: Dehydroquinase synthase-like Family: Iron-containing alcohol dehydrogenase
						Fold: Ribosomal protein S5 domain 2-like

54	d1kija1	Alignment	not modelled	15.7	8	Superfamily: Ribosomal protein S5 domain 2-like Family: DNA gyrase/MutL, second domain
55	d2i76a2	Alignment	not modelled	15.6	15	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
56	d1xi8a3	Alignment	not modelled	15.4	17	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
57	d1ssqa_	Alignment	not modelled	15.4	11	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Serine acetyltransferase
58	c1htjF_	Alignment	not modelled	15.3	22	PDB header: signaling protein Chain: F: PDB Molecule: kiaa0380; PDBTitle: structure of the rgs-like domain from pdz-rhogef
59	d1htj_	Alignment	not modelled	15.3	22	Fold: Regulator of G-protein signaling, RGS Superfamily: Regulator of G-protein signaling, RGS Family: Regulator of G-protein signaling, RGS
60	d2fcja1	Alignment	not modelled	15.3	20	Fold: Toprim domain Superfamily: Toprim domain Family: Toprim domain
61	c2v0xB_	Alignment	not modelled	15.2	19	PDB header: cell cycle Chain: B: PDB Molecule: lamina-associated polypeptide 2 isoforms PDBTitle: the dimerization domain of lap2alpha
62	c2l3mA_	Alignment	not modelled	14.8	10	PDB header: metal binding protein Chain: A: PDB Molecule: copper-ion-binding protein; PDBTitle: solution structure of the putative copper-ion-binding protein from2 bacillus anthracis str. ames
63	c3nohA_	Alignment	not modelled	14.4	29	PDB header: peptide binding protein Chain: A: PDB Molecule: putative peptide binding protein; PDBTitle: crystal structure of a putative peptide binding protein (rumgna_00914)2 from ruminococcus gnavus atcc 29149 at 1.60 a resolution
64	d2cpqa1	Alignment	not modelled	14.3	35	Fold: Eukaryotic type KH-domain (KH-domain type I) Superfamily: Eukaryotic type KH-domain (KH-domain type I) Family: Eukaryotic type KH-domain (KH-domain type I)
65	d2hk6a1	Alignment	not modelled	14.1	14	Fold: Chelatase-like Superfamily: Chelatase Family: Ferrochelatase
66	c1wqaB_	Alignment	not modelled	13.7	13	PDB header: isomerase Chain: B: PDB Molecule: phospho-sugar mutase; PDBTitle: crystal structure of pyrococcus horikoshii2 phosphomannomutase/phosphoglucomutase complexed with mg2+
67	c3u0vA_	Alignment	not modelled	13.7	11	PDB header: hydrolase Chain: A: PDB Molecule: lysophospholipase-like protein 1; PDBTitle: crystal structure analysis of human lyp1a1
68	d1q8la_	Alignment	not modelled	13.3	7	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
69	d2hiya1	Alignment	not modelled	13.2	6	Fold: SP0830-like Superfamily: SP0830-like Family: SP0830-like
70	c2k29A_	Alignment	not modelled	13.1	11	PDB header: transcription Chain: A: PDB Molecule: antitoxin relb; PDBTitle: structure of the dbd domain of e. coli antitoxin relb
71	c2rafC_	Alignment	not modelled	13.1	22	PDB header: oxidoreductase Chain: C: PDB Molecule: putative dinucleotide-binding oxidoreductase; PDBTitle: crystal structure of putative dinucleotide-binding2 oxidoreductase (np_786167.1) from lactobacillus plantarum3 at 1.60 a resolution
72	d1e5da1	Alignment	not modelled	13.0	17	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
73	c3gx1A_	Alignment	not modelled	12.9	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lin1832 protein; PDBTitle: crystal structure of a domain of lin1832 from listeria innocua
74	c3nhzA_	Alignment	not modelled	12.8	17	PDB header: dna binding protein Chain: A: PDB Molecule: two component system transcriptional regulator mtra; PDBTitle: structure of n-terminal domain of mtra
75	d1s6ua_	Alignment	not modelled	12.6	11	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
76	d1cvra1	Alignment	not modelled	12.6	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Gingipain R (RgpB), C-terminal domain
77	c2j48A_	Alignment	not modelled	12.4	14	PDB header: transferase Chain: A: PDB Molecule: two-component sensor kinase; PDBTitle: nmr structure of the pseudo-receiver domain of the cika2 protein.
78	c3cf4A_	Alignment	not modelled	12.3	16	PDB header: oxidoreductase Chain: A: PDB Molecule: acetyl-coa decarboxylase/synthase alpha subunit; PDBTitle: structure of the codh component of the m. barkeri acds complex
79	d1afia_	Alignment	not modelled	12.3	6	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
						PDB header: lyase

80	c3clhA_	Alignment	not modelled	12.2	7	Chain: A: PDB Molecule: 3-dehydroquinate synthase; PDBTitle: crystal structure of 3-dehydroquinate synthase (dhqs)from2 helicobacter pylori
81	c2vq3B_	Alignment	not modelled	12.1	13	PDB header: oxidoreductase Chain: B: PDB Molecule: metalloreductase steap3; PDBTitle: crystal structure of the membrane proximal oxidoreductase2 domain of human steap3, the dominant ferric reductase of3 the erythroid transferrin cycle
82	d1mioa_	Alignment	not modelled	12.0	11	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
83	d1kvja_	Alignment	not modelled	11.9	9	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
84	d1l8qa2	Alignment	not modelled	11.5	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
85	c3okfA_	Alignment	not modelled	11.4	17	PDB header: lyase Chain: A: PDB Molecule: 3-dehydroquinate synthase; PDBTitle: 2.5 angstrom resolution crystal structure of 3-dehydroquinate synthase2 (arob) from vibrio cholerae
86	c2r98A_	Alignment	not modelled	11.3	16	PDB header: transferase Chain: A: PDB Molecule: putative acetylglutamate synthase; PDBTitle: crystal structure of n-acetylglutamate synthase (selenomet2 substituted) from neisseria gonorrhoeae
87	c3trdA_	Alignment	not modelled	11.2	14	PDB header: hydrolase Chain: A: PDB Molecule: alpha/beta hydrolase; PDBTitle: structure of an alpha-beta serine hydrolase homologue from coxiella2 burnetii
88	d1p6ta1	Alignment	not modelled	11.2	7	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
89	d1bxca_	Alignment	not modelled	11.2	15	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: Xylose isomerase
90	c2yvqA_	Alignment	not modelled	11.1	15	PDB header: ligase Chain: A: PDB Molecule: carbamoyl-phosphate synthase; PDBTitle: crystal structure of mgs domain of carbamoyl-phosphate2 synthetase from homo sapiens
91	d1p9oa_	Alignment	not modelled	11.0	19	Fold: Ribokinase-like Superfamily: CoaB-like Family: CoaB-like
92	d1zesa1	Alignment	not modelled	10.9	18	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
93	d1wu2a3	Alignment	not modelled	10.7	18	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
94	d1w25a1	Alignment	not modelled	10.4	16	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
95	c3qd7X_	Alignment	not modelled	10.3	25	PDB header: hydrolase Chain: X: PDB Molecule: uncharacterized protein ydal; PDBTitle: crystal structure of ydal, a stand-alone small muts-related protein2 from escherichia coli
96	d2auna2	Alignment	not modelled	10.2	10	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: LD-carboxypeptidase A N-terminal domain-like
97	c2ldiA_	Alignment	not modelled	10.2	17	PDB header: hydrolase Chain: A: PDB Molecule: zinc-transporting atpase; PDBTitle: nmr solution structure of ziaan sub mutant
98	d1qh8a_	Alignment	not modelled	10.1	9	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
99	d1mb3a_	Alignment	not modelled	10.0	18	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related