

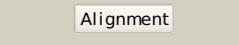
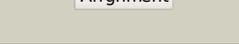
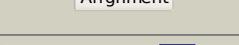
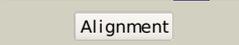
Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P33361
Date	Thu Jan 5 11:52:03 GMT 2012
Unique Job ID	faac36e4c44a6b0d

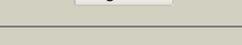
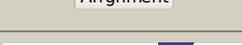
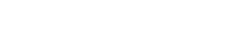
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d3d31c1	 Alignment		99.9	15	Fold: Metl-like Superfamily: Metl-like Family: Metl-like
2	c3d31D_	 Alignment		99.9	15	PDB header: transport protein Chain: D: PDB Molecule: sulfate/molybdate abc transporter, permease PDBTitle: modbc from methanosarcina acetivorans
3	c2onkC_	 Alignment		99.9	13	PDB header: membrane protein Chain: C: PDB Molecule: molybdate/tungstate abc transporter, permease PDBTitle: abc transporter modbc in complex with its binding protein2 moda
4	d2onkc1	 Alignment		99.9	13	Fold: Metl-like Superfamily: Metl-like Family: Metl-like
5	d3dhwa1	 Alignment		99.8	25	Fold: Metl-like Superfamily: Metl-like Family: Metl-like
6	c2r6gF_	 Alignment		99.8	15	PDB header: hydrolase/transport protein Chain: F: PDB Molecule: maltose transport system permease protein malf; PDBTitle: the crystal structure of the e. coli maltose transporter
7	d2r6gf2	 Alignment		99.8	16	Fold: Metl-like Superfamily: Metl-like Family: Metl-like
8	c3fh6F_	 Alignment		99.8	15	PDB header: transport protein Chain: F: PDB Molecule: maltose transport system permease protein malf; PDBTitle: crystal structure of the resting state maltose transporter from e.2 coli
9	d2r6gg1	 Alignment		99.6	14	Fold: Metl-like Superfamily: Metl-like Family: Metl-like
10	d1ntca_	 Alignment		42.9	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
11	d1umqa_	 Alignment		35.4	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like

12	c1umqA_	Alignment		35.4	19	PDB header: dna-binding protein Chain: A: PDB Molecule: photosynthetic apparatus regulatory protein; PDBTitle: solution structure and dna binding of the effector domain2 from the global regulator prra(rega) from r. sphaeroides:3 insights into dna binding specificity
13	c3e7lD_	Alignment		24.1	13	PDB header: transcription regulator Chain: D: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigma54 activator ntrc4's dna binding2 domain
14	d1fipa_	Alignment		23.9	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
15	d1etob_	Alignment		23.4	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
16	d1etxa_	Alignment		19.7	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
17	d1g2ha_	Alignment		15.4	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
18	c2jwaA_	Alignment		15.1	21	PDB header: transferase Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-2; PDBTitle: erbb2 transmembrane segment dimer spatial structure
19	d1jb0j_	Alignment		12.6	27	Fold: Single transmembrane helix Superfamily: Subunit IX of photosystem I reaction centre, Psaj Family: Subunit IX of photosystem I reaction centre, Psaj
20	c2cw1A_	Alignment		11.4	28	PDB header: de novo protein Chain: A: PDB Molecule: sn4m; PDBTitle: solution structure of the de novo-designed lambda cro fold2 protein
21	c2k21A_	Alignment	not modelled	11.2	12	PDB header: membrane protein Chain: A: PDB Molecule: potassium voltage-gated channel subfamily e PDBTitle: nmr structure of human kcne1 in Impg micelles at ph 6.0 and2 40 degree c
22	d2auwa1	Alignment	not modelled	10.7	22	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: NE0471 C-terminal domain-like
23	c1ciiA_	Alignment	not modelled	10.2	25	PDB header: transmembrane protein Chain: A: PDB Molecule: colicin ia; PDBTitle: colicin ia
24	d2ns0a1	Alignment	not modelled	9.6	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: RHA1 ro06458-like
25	c3hzqA_	Alignment	not modelled	9.1	20	PDB header: membrane protein Chain: A: PDB Molecule: large-conductance mechanosensitive channel; PDBTitle: structure of a tetrameric mscl in an expanded intermediate2 state
26	d1i3ja_	Alignment	not modelled	9.0	19	Fold: DNA-binding domain of intron-encoded endonucleases Superfamily: DNA-binding domain of intron-encoded endonucleases Family: DNA-binding domain of intron-encoded endonucleases
27	d1t1ra3	Alignment	not modelled	8.8	50	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
28	d1rubx4	Alignment	not modelled	8.8	63	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain

29	c2ka2B	 Alignment	not modelled	8.8	21	PDB header: membrane protein Chain: B: PDB Molecule: bcl2/adenovirus e1b 19 kda protein-interacting PDBTitle: solution nmr structure of bnip3 transmembrane peptide dimer2 in detergent micelles with his173-ser172 intermonomer3 hydrogen bond restraints
30	c2ka2A	 Alignment	not modelled	8.8	21	PDB header: membrane protein Chain: A: PDB Molecule: bcl2/adenovirus e1b 19 kda protein-interacting PDBTitle: solution nmr structure of bnip3 transmembrane peptide dimer2 in detergent micelles with his173-ser172 intermonomer3 hydrogen bond restraints
31	c2ka1B	 Alignment	not modelled	8.8	21	PDB header: membrane protein Chain: B: PDB Molecule: bcl2/adenovirus e1b 19 kda protein-interacting PDBTitle: solution nmr structure of bnip3 transmembrane peptide dimer2 in detergent micelles
32	c2ka1A	 Alignment	not modelled	8.8	21	PDB header: membrane protein Chain: A: PDB Molecule: bcl2/adenovirus e1b 19 kda protein-interacting PDBTitle: solution nmr structure of bnip3 transmembrane peptide dimer2 in detergent micelles
33	c2auwB	 Alignment	not modelled	8.4	16	PDB header: unknown function Chain: B: PDB Molecule: hypothetical protein ne0471; PDBTitle: crystal structure of putative dna binding protein ne0471 from2 nitrosomonas europaea atcc 19718
34	d2phcb1	 Alignment	not modelled	8.3	16	Fold: Cyclophilin-like Superfamily: Cyclophilin-like Family: PH0987 C-terminal domain-like
35	c3mmlD	 Alignment	not modelled	8.0	26	PDB header: hydrolase Chain: D: PDB Molecule: allophanate hydrolase subunit 1; PDBTitle: allophanate hydrolase complex from mycobacterium smegmatis, msme0435-2 msme0436
36	d1cf7a	 Alignment	not modelled	7.8	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Cell cycle transcription factor e2f-dp
37	c2kr6A	 Alignment	not modelled	7.8	21	PDB header: hydrolase Chain: A: PDB Molecule: presenilin-1; PDBTitle: solution structure of presenilin-1 ctf subunit
38	c2d7dB	 Alignment	not modelled	7.8	23	PDB header: hydrolase/dna Chain: B: PDB Molecule: 40-mer from uvrabc system protein b; PDBTitle: structural insights into the cryptic dna dependent atp-ase2 activity of uvrbc
39	d1kqfb2	 Alignment	not modelled	7.8	22	Fold: Single transmembrane helix Superfamily: Iron-sulfur subunit of formate dehydrogenase N, transmembrane anchor Family: Iron-sulfur subunit of formate dehydrogenase N, transmembrane anchor
40	c1vf5E	 Alignment	not modelled	7.7	21	PDB header: photosynthesis Chain: E: PDB Molecule: protein pet I; PDBTitle: crystal structure of cytochrome b6f complex from m.laminosus
41	c2e75E	 Alignment	not modelled	7.7	21	PDB header: photosynthesis Chain: E: PDB Molecule: cytochrome b6-f complex subunit 6; PDBTitle: crystal structure of the cytochrome b6f complex with 2-nonyl-4-2 hydroxyquinoline n-oxide (nqno) from m.laminosus
42	c1vf5R	 Alignment	not modelled	7.7	21	PDB header: photosynthesis Chain: R: PDB Molecule: protein pet I; PDBTitle: crystal structure of cytochrome b6f complex from m.laminosus
43	c2e74E	 Alignment	not modelled	7.7	21	PDB header: photosynthesis Chain: E: PDB Molecule: cytochrome b6-f complex subunit 6; PDBTitle: crystal structure of the cytochrome b6f complex from m.laminosus
44	d2e74e1	 Alignment	not modelled	7.7	21	Fold: Single transmembrane helix Superfamily: PetL subunit of the cytochrome b6f complex Family: PetL subunit of the cytochrome b6f complex
45	c2e76E	 Alignment	not modelled	7.7	21	PDB header: photosynthesis Chain: E: PDB Molecule: cytochrome b6-f complex subunit 6; PDBTitle: crystal structure of the cytochrome b6f complex with tridecyl-2 stigmatellin (tds) from m.laminosus
46	c2voyB	 Alignment	not modelled	7.5	29	PDB header: hydrolase Chain: B: PDB Molecule: sarcoplasmic/endoplasmic reticulum calcium PDBTitle: cryoem model of copa, the copper transporting atpase from2 archaeoglobus fulgidus
47	c2zp2B	Alignment	not modelled	7.2	15	PDB header: transferase inhibitor Chain: B: PDB Molecule: kinase a inhibitor; PDBTitle: c-terminal domain of kipi from bacillus subtilis
48	d2nwa1	Alignment	not modelled	7.1	29	Fold: RL5-like Superfamily: RL5-like Family: SSO1042-like
49	c2hx6A	Alignment	not modelled	7.1	29	PDB header: hydrolase Chain: A: PDB Molecule: ribonuclease; PDBTitle: solution structure analysis of the phage t42 endoribonuclease regb
50	d1a9xa1	Alignment	not modelled	7.0	21	Fold: Carbamoyl phosphate synthetase, large subunit connection domain Superfamily: Carbamoyl phosphate synthetase, large subunit connection domain Family: Carbamoyl phosphate synthetase, large subunit connection domain
51	c2kwvA	Alignment	not modelled	7.0	21	PDB header: protein binding/signaling protein Chain: A: PDB Molecule: dna polymerase iota; PDBTitle: solution structure of ubm1 of murine polymerase iota in complex with2 ubiquitin
52	d2pzza1	Alignment	not modelled	6.8	43	Fold: RL5-like Superfamily: RL5-like

							Family: SSO1042-like
53	c3c9gB_	Alignment	not modelled	6.8	14	PDB header: nucleotide binding protein Chain: B: PDB Molecule: upf0200/upf0201 protein af_1395; PDBTitle: crystal structure of uncharacterized upf0201 protein af_135	
54	c2j5dA_	Alignment	not modelled	6.8	21	PDB header: membrane protein Chain: A: PDB Molecule: bcl2/adenovirus e1b 19 kda protein-interacting PDBTitle: nmr structure of bnip3 transmembrane domain in lipid2 bicelles	
55	c2k1lA_	Alignment	not modelled	6.6	35	PDB header: signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 6.3	
56	c2k1lB_	Alignment	not modelled	6.6	35	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 6.3	
57	c2k1kB_	Alignment	not modelled	6.6	35	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 4.3	
58	c2k1kA_	Alignment	not modelled	6.6	35	PDB header: signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 4.3	
59	c1pyuD_	Alignment	not modelled	6.6	40	PDB header: lyase Chain: D: PDB Molecule: aspartate 1-decarboxylase alfa chain; PDBTitle: processed aspartate decarboxylase mutant with ser25 mutated to cys	
60	d1st6a6	Alignment	not modelled	6.5	15	Fold: Four-helical up-and-down bundle Superfamily: alpha-catenin/vinculin-like Family: alpha-catenin/vinculin	
61	c3d7aB_	Alignment	not modelled	6.3	8	PDB header: unknown function Chain: B: PDB Molecule: upf0201 protein ph1010; PDBTitle: crystal structure of duf54 family protein ph1010 from2 hyperthermophilic archaea pyrococcus horikoshii ot3	
62	d3cx5c1	Alignment	not modelled	6.3	7	Fold: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Superfamily: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Family: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)	
63	c1twcF_	Alignment	not modelled	6.2	36	PDB header: transcription Chain: F: PDB Molecule: dna-directed rna polymerases i, ii, and iii 23 PDBTitle: rna polymerase ii complexed with gtp	
64	d1ppic1	Alignment	not modelled	6.2	12	Fold: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Superfamily: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Family: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)	
65	d1twff_	Alignment	not modelled	6.2	36	Fold: RPB6/omega subunit-like Superfamily: RPB6/omega subunit-like Family: RPB6	
66	c2vn2B_	Alignment	not modelled	6.1	14	PDB header: replication Chain: B: PDB Molecule: chromosome replication initiation protein; PDBTitle: crystal structure of the n-terminal domain of dnad protein2 from geobacillus kaustophilus hta426	
67	c2phcB_	Alignment	not modelled	6.1	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein ph0987; PDBTitle: crystal structure of conserved uncharacterized protein ph0987 from2 pyrococcus horikoshii	
68	c2pmzW_	Alignment	not modelled	6.1	29	PDB header: translation, transferase Chain: W: PDB Molecule: dna-directed rna polymerase subunit k; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus	
69	c2rnoA_	Alignment	not modelled	6.1	38	PDB header: ligase Chain: A: PDB Molecule: putative dna-binding protein; PDBTitle: solution structure of the n-terminal sap domain of sumo e3 ligases2 from oryza sativa	
70	d1rh5b_	Alignment	not modelled	6.0	14	Fold: Single transmembrane helix Superfamily: Preprotein translocase SecE subunit Family: Preprotein translocase SecE subunit	
71	c3mkuA_	Alignment	not modelled	6.0	17	PDB header: transport protein Chain: A: PDB Molecule: multi antimicrobial extrusion protein (na(+))/drug PDBTitle: structure of a cation-bound multidrug and toxin compound extrusion2 (mate) transporter	
72	c2nq2A_	Alignment	not modelled	5.9	18	PDB header: metal transport Chain: A: PDB Molecule: hypothetical abc transporter permease protein PDBTitle: an inward-facing conformation of a putative metal-chelate2 type abc transporter.	
73	d1i1ga1	Alignment	not modelled	5.7	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain	
74	d2cyya1	Alignment	not modelled	5.6	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain	
75	d1quba5	Alignment	not modelled	5.6	14	Fold: Complement control module/SCR domain Superfamily: Complement control module/SCR domain Family: Complement control module/SCR domain	
76	d1c1za5	Alignment	not modelled	5.6	15	Fold: Complement control module/SCR domain Superfamily: Complement control module/SCR domain Family: Complement control module/SCR domain	

77	d2hwna1	 Alignment	not modelled	5.6	32	Fold: Dimerization-anchoring domain of cAMP-dependent PK regulatory subunit Superfamily: Dimerization-anchoring domain of cAMP-dependent PK regulatory subunit Family: Dimerization-anchoring domain of cAMP-dependent PK regulatory subunit
78	c3skqA_	 Alignment	not modelled	5.5	13	PDB header: metal transport Chain: A: PDB Molecule: mitochondrial distribution and morphology protein 38; PDBTitle: mdm38 is a 14-3-3-like receptor and associates with the protein2 synthesis machinery at the inner mitochondrial membrane
79	d1bccc2	 Alignment	not modelled	5.4	11	Fold: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Superfamily: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Family: a domain/subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
80	d1qkla_	 Alignment	not modelled	5.4	36	Fold: RPB6/omega subunit-like Superfamily: RPB6/omega subunit-like Family: RPB6
81	c1vc3B_	 Alignment	not modelled	5.4	30	PDB header: lyase Chain: B: PDB Molecule: l-aspartate-alpha-decarboxylase heavy chain; PDBTitle: crystal structure of l-aspartate-alpha-decarboxylase
82	c3s1bA_	 Alignment	not modelled	5.4	19	PDB header: signaling protein Chain: A: PDB Molecule: mini-z; PDBTitle: the development of peptide-based tools for the analysis of2 angiogenesis
83	c3gucB_	 Alignment	not modelled	5.3	29	PDB header: transferase Chain: B: PDB Molecule: ubiquitin-like modifier-activating enzyme 5; PDBTitle: human ubiquitin-activating enzyme 5 in complex with amppnp
84	c3iwcD_	 Alignment	not modelled	5.2	17	PDB header: lyase Chain: D: PDB Molecule: s-adenosylmethionine decarboxylase; PDBTitle: t. maritima adometdc complex with s-adenosylmethionine2 methyl ester
85	d1jhfa1	 Alignment	not modelled	5.2	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: LexA repressor, N-terminal DNA-binding domain
86	d1pgja1	 Alignment	not modelled	5.1	7	Fold: 6-phosphogluconate dehydrogenase C-terminal domain-like Superfamily: 6-phosphogluconate dehydrogenase C-terminal domain-like Family: Hydroxyisobutyrate and 6-phosphogluconate dehydrogenase domain
87	d1nvma1	 Alignment	not modelled	5.1	6	Fold: RuvA C-terminal domain-like Superfamily: post-HMGL domain-like Family: DmpG/LeuA communication domain-like
88	d2pgda1	 Alignment	not modelled	5.1	9	Fold: 6-phosphogluconate dehydrogenase C-terminal domain-like Superfamily: 6-phosphogluconate dehydrogenase C-terminal domain-like Family: Hydroxyisobutyrate and 6-phosphogluconate dehydrogenase domain
89	c2ijlB_	 Alignment	not modelled	5.0	25	PDB header: transcription Chain: B: PDB Molecule: molybdenum-binding transcriptional repressor; PDBTitle: the structure of a putative mode from agrobacterium tumefaciens.
90	d1ui5a2	 Alignment	not modelled	5.0	16	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
91	c3h0gF_	 Alignment	not modelled	5.0	36	PDB header: transcription Chain: F: PDB Molecule: dna-directed rna polymerases i, ii, and iii PDBTitle: rna polymerase ii from schizosaccharomyces pombe
92	d1oxwa_	 Alignment	not modelled	5.0	29	Fold: FabD/lysophospholipase-like Superfamily: FabD/lysophospholipase-like Family: Patatin