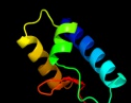
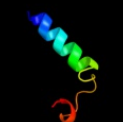


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P28912
Date	Thu Jan 5 11:45:24 GMT 2012
Unique Job ID	7cd5438d21624744

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1musa_	 Alignment		97.7	12	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Transposase inhibitor (Tn5 transposase)
2	d1b7ea_	 Alignment		97.7	10	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Transposase inhibitor (Tn5 transposase)
3	d2v9va2	 Alignment		79.2	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: C-terminal fragment of elongation factor SelB
4	c2v9vA_	 Alignment		65.1	12	PDB header: transcription Chain: A: PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: crystal structure of moorella thermoacetica selb(377-511)
5	d2ezha_	 Alignment		50.9	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
6	d2ezia_	 Alignment		49.1	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
7	c6paxA_	 Alignment		43.9	22	PDB header: gene regulation/dna Chain: A: PDB Molecule: homeobox protein pax-6; PDBTitle: crystal structure of the human pax-6 paired domain-dna2 complex reveals a general model for pax protein-dna3 interactions
8	c3hefB_	 Alignment		40.9	22	PDB header: viral protein Chain: B: PDB Molecule: gene 1 protein; PDBTitle: crystal structure of the bacteriophage sf6 terminase small2 subunit
9	c2plyB_	 Alignment		22.7	11	PDB header: translation/rna Chain: B: PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: structure of the mrna binding fragment of elongation factor2 selb in complex with secis rna.
10	d1e8qa_	 Alignment		20.2	36	Fold: Cellulose docking domain, docking Superfamily: Cellulose docking domain, docking Family: Cellulose docking domain, docking
11	d1pdnc_	 Alignment		19.5	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Paired domain

12	d1dlwa_	Alignment		19.4	11	Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
13	c2rfpA_	Alignment		16.4	15	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
14	d1ajza_	Alignment		15.5	12	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
15	c3aq8A_	Alignment		15.3	4	PDB header: oxygen binding Chain: A: PDB Molecule: group 1 truncated hemoglobin; PDBTitle: crystal structure of truncated hemoglobin from tetrahymena pyriformis,2 q46e mutant, fe(iii) form
16	d2fgga1	Alignment		15.3	31	Fold: dsRBD-like Superfamily: Rv2632c-like Family: Rv2632c-like
17	c2kvca_	Alignment		15.2	23	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: solution structure of the mycobacterium tuberculosis protein rv0543c,2 a member of the duf3349 superfamily. seattle structural genomics3 center for infectious disease target mytud.17112.a
18	c3mx7A_	Alignment		14.8	29	PDB header: apoptosis Chain: A: PDB Molecule: fas apoptotic inhibitory molecule 1; PDBTitle: crystal structure analysis of human faim-ntd
19	c2vp8A_	Alignment		14.8	18	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase 2; PDBTitle: structure of mycobacterium tuberculosis rv1207
20	d1s69a_	Alignment		14.5	21	Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
21	d1iyxa1	Alignment	not modelled	13.3	19	Fold: TIM beta/alpha-barrel Superfamily: Enolase C-terminal domain-like Family: Enolase
22	c2k27A_	Alignment	not modelled	13.2	25	PDB header: transcription regulator Chain: A: PDB Molecule: paired box protein pax-8; PDBTitle: solution structure of human pax8 paired box domain
23	c3ol4B_	Alignment	not modelled	12.7	26	PDB header: unknown function Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of a putative uncharacterized protein from2 mycobacterium smegmatis, an ortholog of rv0543c
24	c3e2dB_	Alignment	not modelled	12.4	17	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: the 1.4 a crystal structure of the large and cold-active2 vibrio sp. alkaline phosphatase
25	c2j4mA_	Alignment	not modelled	11.9	36	PDB header: protein binding Chain: A: PDB Molecule: endoglucanase 45a; PDBTitle: double dockerin from piromyces equi cel45a
26	d1idra_	Alignment	not modelled	11.7	7	Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
27	c1qcrD_	Alignment	not modelled	11.3	8	PDB header: PDB COMPND:
28	d1mpga1	Alignment	not modelled	11.3	11	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: DNA repair glycosylase, 2 C-terminal domains
29	d1g9ga_	Alignment	not modelled	10.5	63	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases

					Family: Cellulases catalytic domain
30	d1md6a_	Alignment	not modelled	10.3	17 Fold: beta-Trefoil Superfamily: Cytokine Family: Interleukin-1 (IL-1)
31	c2y5sA_	Alignment	not modelled	10.1	15 PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: crystal structure of burkholderia cenocepacia dihydropteroate2 synthase complexed with 7,8-dihydropteroate.
32	c2kzvA_	Alignment	not modelled	9.9	21 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of cv_0373(175-257) protein from2 chromobacterium violaceum, northeast structural genomics consortium3 target cvr118a
33	d3bpya1	Alignment	not modelled	9.7	13 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
34	d1osna_	Alignment	not modelled	9.7	8 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nucleotide and nucleoside kinases
35	c3rf7A_	Alignment	not modelled	9.2	11 PDB header: oxidoreductase Chain: A: PDB Molecule: iron-containing alcohol dehydrogenase; PDBTitle: crystal structure of an iron-containing alcohol dehydrogenase2 (sden_2133) from shewanella denitrificans os-217 at 2.12 a resolution
36	c1e17A_	Alignment	not modelled	8.8	9 PDB header: dna binding domain Chain: A: PDB Molecule: afx; PDBTitle: solution structure of the dna binding domain of the human2 forkhead transcription factor afx (foxo4)
37	d2c6ya1	Alignment	not modelled	8.8	6 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
38	c3r1iB_	Alignment	not modelled	8.7	25 PDB header: oxidoreductase Chain: B: PDB Molecule: short-chain type dehydrogenase/reductase; PDBTitle: crystal structure of a short-chain type dehydrogenase/reductase from2 mycobacterium marinum
39	c1dlyA_	Alignment	not modelled	8.5	12 PDB header: oxygen storage/transport Chain: A: PDB Molecule: hemoglobin; PDBTitle: x-ray crystal structure of hemoglobin from the green2 unicellular alga chlamydomonas eugametos
40	d1dlyA_	Alignment	not modelled	8.5	12 Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
41	c3gk0H_	Alignment	not modelled	8.4	20 PDB header: transferase Chain: H: PDB Molecule: pyridoxine 5'-phosphate synthase; PDBTitle: crystal structure of pyridoxal phosphate biosynthetic2 protein from burkholderia pseudomallei
42	c1l2aD_	Alignment	not modelled	8.4	50 PDB header: hydrolase Chain: D: PDB Molecule: cellulobiohydrolase; PDBTitle: the crystal structure and catalytic mechanism of2 cellulobiohydrolase cels, the major enzymatic component of3 the clostridium thermocellum cellulosome
43	d1l1ya_	Alignment	not modelled	8.4	50 Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Cellulases catalytic domain
44	d1w6ta1	Alignment	not modelled	8.4	20 Fold: TIM beta/alpha-barrel Superfamily: Enolase C-terminal domain-like Family: Enolase
45	c3co7C_	Alignment	not modelled	8.4	14 PDB header: transcription/dna Chain: C: PDB Molecule: forkhead box protein o1; PDBTitle: crystal structure of foxo1 dbd bound to dbe2 dna
46	d2ilaa_	Alignment	not modelled	8.1	22 Fold: beta-Trefoil Superfamily: Cytokine Family: Interleukin-1 (IL-1)
47	c3cwbQ_	Alignment	not modelled	7.9	8 PDB header: oxidoreductase Chain: Q: PDB Molecule: mitochondrial cytochrome c1, heme protein; PDBTitle: chicken cytochrome bc1 complex inhibited by an iodinated analogue of2 the polyketide crocacin-d
48	d2ptza1	Alignment	not modelled	7.8	13 Fold: TIM beta/alpha-barrel Superfamily: Enolase C-terminal domain-like Family: Enolase
49	c3nswA_	Alignment	not modelled	7.8	38 PDB header: immune system Chain: A: PDB Molecule: excretory-secretory protein 2; PDBTitle: crystal structure of ancylostoma ceylanicum excretory-secretory2 protein 2
50	d2ezla_	Alignment	not modelled	7.8	10 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
51	c2yf3F_	Alignment	not modelled	7.7	20 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
52	c2x4mD_	Alignment	not modelled	7.7	27 PDB header: hydrolase Chain: D: PDB Molecule: coagulase/fibrinolysin; PDBTitle: yersinia pestis plasminogen activator pla
53	c1hj0A_	Alignment	not modelled	7.6	19 PDB header: actin binding peptide Chain: A: PDB Molecule: thymosin beta9; PDBTitle: thymosin beta9
54	d1g31a_	Alignment	not modelled	7.6	13 Fold: GroES-like Superfamily: GroES-like Family: GroES

55	d2abka	Alignment	not modelled	7.3	13	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Endonuclease III
56	c3hluA	Alignment	not modelled	7.2	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein duf2179; PDBTitle: crystal structure of uncharacterized protein conserved in bacteria2 duf2179 from eubacterium ventriosum
57	c1p84D	Alignment	not modelled	7.1	11	PDB header: oxidoreductase Chain: D: PDB Molecule: cytochrome c1, heme protein; PDBTitle: hdbt inhibited yeast cytochrome bc1 complex
58	d1vi7a1	Alignment	not modelled	7.1	19	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: YigZ N-terminal domain-like
59	c2jpiA	Alignment	not modelled	7.1	17	PDB header: structural genomics Chain: A: PDB Molecule: hypothetical protein; PDBTitle: chemical shift assignments of pa4090 from pseudomonas2 aeruginosa
60	d1rh6a	Alignment	not modelled	7.0	15	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: Excisionase-like
61	d1eyea	Alignment	not modelled	6.8	19	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
62	c3g73A	Alignment	not modelled	6.8	17	PDB header: transcription/dna Chain: A: PDB Molecule: forkhead box protein m1; PDBTitle: structure of the foxm1 dna binding
63	d2a22a1	Alignment	not modelled	6.7	20	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: YfcE-like
64	d2giab1	Alignment	not modelled	6.7	63	Fold: ssDNA-binding transcriptional regulator domain Superfamily: ssDNA-binding transcriptional regulator domain Family: Guide RNA binding protein gBP
65	c2giaB	Alignment	not modelled	6.7	63	PDB header: translation Chain: B: PDB Molecule: mitochondrial rna-binding protein 1; PDBTitle: crystal structures of trypanosoma brucei mrp1/mrp2
66	d1m5wa	Alignment	not modelled	6.6	24	Fold: TIM beta/alpha-barrel Superfamily: Pyridoxine 5'-phosphate synthase Family: Pyridoxine 5'-phosphate synthase
67	d1pcna1	Alignment	not modelled	6.5	36	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Colipase-like Family: Colipase-like
68	c1gmuB	Alignment	not modelled	6.5	9	PDB header: metallochaperone Chain: B: PDB Molecule: uree; PDBTitle: structure of uree
69	d1logla	Alignment	not modelled	6.5	18	Fold: all-alpha NTP pyrophosphatases Superfamily: all-alpha NTP pyrophosphatases Family: Type II deoxyuridine triphosphatase
70	d1un2a	Alignment	not modelled	6.4	14	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: DsbA-like
71	c3douA	Alignment	not modelled	6.4	21	PDB header: transferase Chain: A: PDB Molecule: ribosomal rna large subunit methyltransferase j; PDBTitle: crystal structure of methyltransferase involved in cell2 division from thermoplasma volcanicum gss1
72	c3a44D	Alignment	not modelled	6.4	0	PDB header: metal binding protein Chain: D: PDB Molecule: hydrogenase nickel incorporation protein hypa; PDBTitle: crystal structure of hypa in the dimeric form
73	c3k6qB	Alignment	not modelled	6.4	14	PDB header: ligand binding protein Chain: B: PDB Molecule: putative ligand binding protein; PDBTitle: crystal structure of an antitoxin part of a putative toxin/antitoxin2 system (swol_0700) from syntrophomonas wolfei subsp. wolfei at 1.80 a3 resolution
74	d1d5va	Alignment	not modelled	6.4	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
75	d1xb4a2	Alignment	not modelled	6.4	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
76	c1c94B	Alignment	not modelled	6.3	63	PDB header: gene regulation Chain: B: PDB Molecule: retro-gcn4 leucine zipper; PDBTitle: reversing the sequence of the gcn4 leucine zipper does not2 affect its fold.
77	d1ha7a	Alignment	not modelled	6.2	17	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
78	c2iucB	Alignment	not modelled	6.1	25	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: structure of alkaline phosphatase from the antarctic2 bacterium tab5
79	c2b99A	Alignment	not modelled	6.1	18	PDB header: transferase Chain: A: PDB Molecule: riboflavin synthase; PDBTitle: crystal structure of an archaeal pentameric riboflavin2 synthase complex with a substrate analog inhibitor
80	d2hfha	Alignment	not modelled	6.0	8	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
81	c3a52A	Alignment	not modelled	6.0	18	PDB header: hydrolase Chain: A: PDB Molecule: cold-active alkaline phosphatase;

81	c3d32A	Alignment	not modelled	6.0	10	PDBTitle: crystal structure of cold-active alkaline phosphatase from2 psychrophile shewanella sp.
82	d1pm6a	Alignment	not modelled	6.0	15	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: Excisionase-like
83	d1j3aa	Alignment	not modelled	6.0	13	Fold: Ribosomal protein L13 Superfamily: Ribosomal protein L13 Family: Ribosomal protein L13
84	d2czda1	Alignment	not modelled	5.9	28	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Decarboxylase
85	c2kl8A	Alignment	not modelled	5.9	14	PDB header: de novo protein Chain: A: PDB Molecule: or15; PDBTitle: solution nmr structure of de novo designed ferredoxin-like2 fold protein, northeast structural genomics consortium3 target or15
86	d2o0ma1	Alignment	not modelled	5.9	16	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
87	c2o0mA	Alignment	not modelled	5.9	16	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator, sorc family; PDBTitle: the crystal structure of the putative sorc family transcriptional2 regulator from enterococcus faecalis
88	c3emkA	Alignment	not modelled	5.8	25	PDB header: oxidoreductase Chain: A: PDB Molecule: glucose/ribitol dehydrogenase; PDBTitle: 2.5a crystal structure of glucose/ribitol dehydrogenase2 from brucella melitensis
89	d2a07f1	Alignment	not modelled	5.8	6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
90	d1f6ya	Alignment	not modelled	5.8	12	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Methyltetrahydrofolate-utilizing methyltransferases
91	c2y6xA	Alignment	not modelled	5.8	11	PDB header: photosynthesis Chain: A: PDB Molecule: photosystem ii 11 kd protein; PDBTitle: structure of psb27 from thermosynechococcus elongatus
92	d1yqea1	Alignment	not modelled	5.8	13	Fold: Phosphorylase/hydrolase-like Superfamily: AF0625-like Family: AF0625-like
93	d2i7pa1	Alignment	not modelled	5.6	23	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Fumble-like
94	d1dqwa	Alignment	not modelled	5.6	27	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Decarboxylase
95	c2dfjA	Alignment	not modelled	5.5	17	PDB header: hydrolase Chain: A: PDB Molecule: diadenosinetetraphosphatase; PDBTitle: crystal structure of the diadenosine tetraphosphate2 hydrolase from shigella flexneri 2a
96	c2wdzD	Alignment	not modelled	5.5	16	PDB header: oxidoreductase Chain: D: PDB Molecule: short-chain dehydrogenase/reductase; PDBTitle: crystal structure of the short chain dehydrogenase2 galactitol-dehydrogenase (gatdh) of rhodobacter3 sphaeroides in complex with nad+ and 1,2-pentandiol
97	d1xi8a3	Alignment	not modelled	5.5	21	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
98	c3n1uA	Alignment	not modelled	5.5	15	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, had superfamily, subfamily iii a; PDBTitle: structure of putative had superfamily (subfamily iii a) hydrolase from2 legionella pneumophila
99	c3pk0B	Alignment	not modelled	5.5	16	PDB header: oxidoreductase Chain: B: PDB Molecule: short-chain dehydrogenase/reductase sdr; PDBTitle: crystal structure of short-chain dehydrogenase/reductase sdr from2 mycobacterium smegmatis