























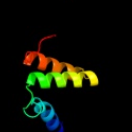
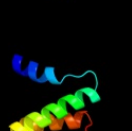
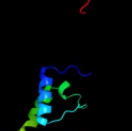
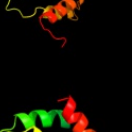
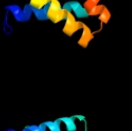

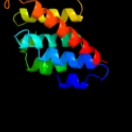


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	Q9Y6P5
Date	Wed Jun 6 09:39:41 BST 2012
Unique Job ID	df68eae108a09dd4

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2pfxa1	 Alignment		99.9	15	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
2	c3c1lB_	 Alignment		99.9	19	PDB header: oxidoreductase Chain: B: PDB Molecule: putative antioxidant defense protein mlr4105; PDBTitle: crystal structure of an antioxidant defense protein (mlr4105) from2 mesorhizobium loti maff303099 at 2.00 a resolution
3	d2oyoal	 Alignment		99.8	17	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
4	d2prra1	 Alignment		99.8	17	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
5	c3lvyB_	 Alignment		99.7	15	PDB header: lyase Chain: B: PDB Molecule: carboxymuconolactone decarboxylase family; PDBTitle: crystal structure of carboxymuconolactone decarboxylase2 family protein smu.961 from streptococcus mutans
6	d2o4da1	 Alignment		99.1	18	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
7	d2ouwa1	 Alignment		99.0	17	Fold: AhpD-like Superfamily: AhpD-like Family: TTHA0727-like
8	d2gmya1	 Alignment		98.8	18	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
9	c2qeuA_	 Alignment		97.6	16	PDB header: lyase Chain: A: PDB Molecule: putative carboxymuconolactone decarboxylase; PDBTitle: crystal structure of putative carboxymuconolactone decarboxylase2 (yp_555818.1) from burkholderia xenovorans lb400 at 1.65 a resolution
10	d2cwqa1	 Alignment		97.5	16	Fold: AhpD-like Superfamily: AhpD-like Family: TTHA0727-like
11	c3beyC_	 Alignment		96.9	17	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: conserved protein o27018; PDBTitle: crystal structure of the protein o27018 from methanobacterium2 thermoautotrophicum. northeast structural genomics consortium target3 tt217
						PDB header: lyase

12	c3d7iB	Alignment		96.8	12	Chain: B: PDB Molecule: carboxymuconolactone decarboxylase family protein; PDBTitle: crystal structure of carboxymuconolactone decarboxylase family protein2 possibly involved in oxygen detoxification (1591455) from3 methanococcus jannaschii at 1.75 a resolution
13	c1p8cD	Alignment		96.8	14	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of tm1620 (apc4843) from thermotoga2 maritima
14	d1vkea	Alignment		95.7	14	Fold: AhpD-like Superfamily: AhpD-like Family: CMD-like
15	d1vkeb	Alignment		95.3	15	Fold: AhpD-like Superfamily: AhpD-like Family: CMD-like
16	d2q0ta1	Alignment		94.3	15	Fold: AhpD-like Superfamily: AhpD-like Family: AhpD
17	d2af7a1	Alignment		79.5	19	Fold: AhpD-like Superfamily: AhpD-like Family: CMD-like
18	c2r8rB	Alignment		54.4	25	PDB header: transferase Chain: B: PDB Molecule: sensor protein; PDBTitle: crystal structure of the n-terminal region (19..243) of sensor protein2 kdpd from pseudomonas syringae pv. tomato str. dc3000
19	d1knca	Alignment		38.8	14	Fold: AhpD-like Superfamily: AhpD-like Family: AhpD
20	c1ckxA	Alignment		31.6	38	PDB header: metal transport Chain: A: PDB Molecule: cystic fibrosis transmembrane conductance PDBTitle: cystic fibrosis transmembrane conductance regulator:2 solution structures of peptides based on the phe508 region,3 the most common site of disease-causing delta-f508 mutation
21	c3ntsB	Alignment	not modelled	21.6	39	PDB header: transferase Chain: B: PDB Molecule: vsdc; PDBTitle: catalytic domain of vsdc from aeromonas hydrophila
22	c2dgaA	Alignment	not modelled	17.6	17	PDB header: rna binding protein Chain: A: PDB Molecule: kiaa0430 protein; PDBTitle: solution structure of the rna recognition motif in kiaa04302 protein
23	c3k1tA	Alignment	not modelled	17.1	30	PDB header: ligase Chain: A: PDB Molecule: glutamate--cysteine ligase gsha; PDBTitle: crystal structure of putative gamma-glutamylcysteine synthetase2 (yp_546622.1) from methylobacillus flagellatus kt at 1.90 a3 resolution
24	c1ckwA	Alignment	not modelled	16.7	31	PDB header: metal transport Chain: A: PDB Molecule: protein (cystic fibrosis transmembrane PDBTitle: cystic fibrosis transmembrane conductance regulator:2 solution structures of peptides based on the phe508 region,3 the most common site of disease-causing delta-f508 mutation
25	d1hw8c2	Alignment	not modelled	16.2	24	Fold: Substrate-binding domain of HMG-CoA reductase Superfamily: Substrate-binding domain of HMG-CoA reductase Family: Substrate-binding domain of HMG-CoA reductase
26	c3c18B	Alignment	not modelled	15.2	13	PDB header: transferase Chain: B: PDB Molecule: nucleotidyltransferase-like protein; PDBTitle: crystal structure of nucleotidyltransferase-like protein2 (zp_00538802.1) from exiguobacterium sibiricum 255-15 at 1.90 a3 resolution
27	c2pehA	Alignment	not modelled	14.3	12	PDB header: protein binding Chain: A: PDB Molecule: splicing factor 45; PDBTitle: crystal structure of the uhm domain of human spf45 in complex with2 sf3b155-uhl5
28	c1ponB	Alignment	not modelled	12.3	38	PDB header: calcium-binding protein Chain: B: PDB Molecule: troponin c; PDBTitle: site iii-site iv troponin c heterodimer, nmr

29	c3btpA	 Alignment	not modelled	11.1	35	PDB header: dna binding protein, chaperone Chain: A: PDB Molecule: single-strand dna-binding protein; PDBTitle: crystal structure of agrobacterium tumefaciens viro2 in complex with2 its chaperone viro1: a novel fold and implications for dna binding
30	d1zk8a2	 Alignment	not modelled	11.1	12	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
31	d1sboxa	 Alignment	not modelled	10.5	25	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: Dachshund-homology domain
32	c3f4mA	 Alignment	not modelled	10.1	18	PDB header: immune system Chain: A: PDB Molecule: tumor necrosis factor, alpha-induced protein 8- PDBTitle: crystal structure of tipe2
33	c3kx6C	 Alignment	not modelled	9.8	35	PDB header: lyase Chain: C: PDB Molecule: fructose-bisphosphate aldolase; PDBTitle: crystal structure of fructose-1,6-bisphosphate aldolase from babesia2 bovis at 2.1a resolution
34	c2qb0D	 Alignment	not modelled	9.4	23	PDB header: hydrolase regulator Chain: D: PDB Molecule: telsam domain - lysozyme chimera; PDBTitle: structure of the 2tel crystallization module fused to t4 lysozyme with2 an ala-gly-pro linker.
35	c2eapA	 Alignment	not modelled	9.4	21	PDB header: signaling protein Chain: A: PDB Molecule: lymphocyte cytosolic protein 2; PDBTitle: solution structure of the n-terminal sam-domain of human2 lymphocyte cytosolic protein 2
36	c1zzaA	 Alignment	not modelled	9.3	26	PDB header: membrane protein Chain: A: PDB Molecule: stannin; PDBTitle: solution nmr structure of the membrane protein stannin
37	d1rz4a1	 Alignment	not modelled	9.1	26	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Eukaryotic translation initiation factor 3 subunit 12, eIF3k, C-terminal domain
38	c1rue4	 Alignment	not modelled	8.9	33	PDB header: virus Chain: 4: PDB Molecule: rhinovirus 14; PDBTitle: rhinovirus 14 site directed mutant n1219a complexed with2 antiviral compound win 52035
39	c3jvfC	 Alignment	not modelled	8.6	24	PDB header: signaling protein / cytokine Chain: C: PDB Molecule: interleukin-17 receptor a; PDBTitle: crystal structure of an interleukin-17 receptor complex
40	d1wj7a1	 Alignment	not modelled	8.4	36	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: UBA domain
41	d1zpya1	 Alignment	not modelled	8.3	14	Fold: Ferritin-like Superfamily: Ferritin-like Family: half-ferritin
42	d1jmsa4	 Alignment	not modelled	8.2	27	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
43	d2ce7a2	 Alignment	not modelled	8.2	7	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Extended AAA-ATPase domain
44	c3thfA	 Alignment	not modelled	8.2	27	PDB header: actin-binding protein/protein binding Chain: A: PDB Molecule: protein shroom; PDBTitle: crystal structure of the sd2 domain from drosophila shroom
45	c1dgi4	 Alignment	not modelled	8.2	39	PDB header: virus/viral protein, receptor Chain: 4: PDB Molecule: vp4; PDB Fragment: poliovirus fragments vp1, vp2, vp3, vp4; PDBTitle:
46	c1bev4	 Alignment	not modelled	8.2	36	PDB header: virus Chain: 4: PDB Molecule: bovine enterovirus coat proteins vp1 to vp4; PDBTitle: bovine enterovirus vg-5-27
47	c3pgwP	 Alignment	not modelled	8.1	15	PDB header: splicing/dna/rna Chain: P: PDB Molecule: u1-a; PDBTitle: crystal structure of human u1 snrnp
48	c3vbhD	 Alignment	not modelled	7.8	27	PDB header: virus Chain: D: PDB Molecule: genome polyprotein, capsid protein vp4; PDBTitle: crystal structure of formaldehyde treated human enterovirus 71 (space2 group r32)
49	d1jmx2	 Alignment	not modelled	7.8	31	Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2
50	c3odnA	 Alignment	not modelled	7.7	15	PDB header: membrane protein Chain: A: PDB Molecule: dally-like protein; PDBTitle: the crystal structure of drosophila dally-like protein core domain
51	c3eq5G	 Alignment	not modelled	7.6	24	PDB header: signaling protein Chain: G: PDB Molecule: ski-like protein; PDBTitle: crystal structure of fragment 137 to 238 of the human ski-like protein
52	d1sxja1	 Alignment	not modelled	7.3	31	Fold: post-AAA+ oligomerization domain-like Superfamily: post-AAA+ oligomerization domain-like Family: DNA polymerase III clamp loader subunits, C-terminal domain
53	d2vana2	 Alignment	not modelled	7.3	9	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
54	c1jew4	Alignment	not modelled	7.2	39	PDB header: virus/receptor Chain: 4: PDB Molecule: coxsackievirus capsid, coat protein vp4; PDB Fragment: residues 21-140; PDBTitle: cryo-em structure of coxsackievirus b3(m strain) with its2 cellular receptor, coxsackievirus and adenovirus receptor3 (car).

55	c1hwjB_	Alignment	not modelled	7.2	24	PDB header: oxidoreductase Chain: B: PDB Molecule: hmg-coa reductase; PDBTitle: complex of the catalytic portion of human hmg-coa reductase2 with cerivastatin
56	c3kf9D_	Alignment	not modelled	7.1	31	PDB header: cell cycle/calcium-binding protein Chain: D: PDB Molecule: myosin light chain kinase 2, skeletal/cardiac muscle; PDBTitle: crystal structure of the sdcen/skmlck complex
57	c2bbnB_	Alignment	not modelled	7.1	31	PDB header: calcium-binding protein Chain: B: PDB Molecule: myosin light chain kinase; PDBTitle: solution structure of a calmodulin-target peptide complex2 by multidimensional nmr
58	c2bbmB_	Alignment	not modelled	7.1	31	PDB header: calcium-binding protein Chain: B: PDB Molecule: myosin light chain kinase; PDBTitle: solution structure of a calmodulin-target peptide complex2 by multidimensional nmr
59	c3kf9B_	Alignment	not modelled	7.0	31	PDB header: cell cycle/calcium-binding protein Chain: B: PDB Molecule: myosin light chain kinase 2, skeletal/cardiac muscle; PDBTitle: crystal structure of the sdcen/skmlck complex
60	c1us7B_	Alignment	not modelled	6.6	21	PDB header: chaperone Chain: B: PDB Molecule: hsp90 co-chaperone cdc37; PDBTitle: complex of hsp90 and p50
61	d1us7b_	Alignment	not modelled	6.6	21	Fold: Hsp90 co-chaperone CDC37 Superfamily: Hsp90 co-chaperone CDC37 Family: Hsp90 co-chaperone CDC37
62	d1ussa_	Alignment	not modelled	6.6	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
63	c2ee7A_	Alignment	not modelled	6.4	26	PDB header: structural protein Chain: A: PDB Molecule: sperm flagellar protein 1; PDBTitle: solution structure of the ch domain from human sperm2 flagellar protein 1
64	c1g2yC_	Alignment	not modelled	6.4	25	PDB header: transcription Chain: C: PDB Molecule: hepatocyte nuclear factor 1-alpha; PDBTitle: hnf-1alpha dimerization domain, with selenomethionine2 substituted at leu 12
65	c21a3A_	Alignment	not modelled	6.3	29	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the nmr structure of the protein np_344798.1 reveals a cca-adding2 enzyme head domain
66	c1g2yB_	Alignment	not modelled	6.3	25	PDB header: transcription Chain: B: PDB Molecule: hepatocyte nuclear factor 1-alpha; PDBTitle: hnf-1alpha dimerization domain, with selenomethionine2 substituted at leu 12
67	c1g2yD_	Alignment	not modelled	6.3	25	PDB header: transcription Chain: D: PDB Molecule: hepatocyte nuclear factor 1-alpha; PDBTitle: hnf-1alpha dimerization domain, with selenomethionine2 substituted at leu 12
68	c2ihmA_	Alignment	not modelled	6.1	36	PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase mu; PDBTitle: polymerase mu in ternary complex with gapped 11mer dna2 duplex and bound incoming nucleotide
69	d2bcqa3	Alignment	not modelled	6.1	18	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
70	c1g2yA_	Alignment	not modelled	6.1	25	PDB header: transcription Chain: A: PDB Molecule: hepatocyte nuclear factor 1-alpha; PDBTitle: hnf-1alpha dimerization domain, with selenomethionine2 substituted at leu 12
71	d1g2ya_	Alignment	not modelled	6.1	25	Fold: Dimerisation interlock Superfamily: Dimerization cofactor of HNF-1 alpha Family: Dimerization cofactor of HNF-1 alpha
72	d2fmpa3	Alignment	not modelled	6.0	9	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
73	c2jmfA_	Alignment	not modelled	6.0	45	PDB header: ligase/signaling protein Chain: A: PDB Molecule: e3 ubiquitin-protein ligase suppressor of deltex; PDBTitle: solution structure of the su(dx) ww4- notch py peptide2 complex
74	d2jmfa1	Alignment	not modelled	6.0	57	Fold: WW domain-like Superfamily: WW domain Family: WW domain
75	d1id3b_	Alignment	not modelled	5.9	21	Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
76	c3c2qA_	Alignment	not modelled	5.9	50	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized conserved protein; PDBTitle: crystal structure of conserved putative lor/sdh protein2 from methanococcus maripaludis s2
77	c2kneB_	Alignment	not modelled	5.8	18	PDB header: metal transport Chain: B: PDB Molecule: atpase, ca++ transporting, plasma membrane 4; PDBTitle: calmodulin wraps around its binding domain in the plasma2 membrane ca2+ pump anchored by a novel 18-1 motif
78	d1hrti_	Alignment	not modelled	5.8	32	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Leech antihemostatic proteins Family: Hirudin-like
79	c3ty8A_	Alignment	not modelled	5.8	29	PDB header: transferase Chain: A: PDB Molecule: polynucleotide 2',3'-cyclic phosphate phosphodiesterase / PDBTitle: crystal structure of c. thermocellum pnkp ligase domain apo form
80	c2krcA_	Alignment	not modelled	5.7	25	PDB header: transcription Chain: A: PDB Molecule: dna-directed rna polymerase subunit delta;

						PDBTitle: solution structure of the n-terminal domain of bacillus2 subtilis delta subunit of rna polymerase
81	c2zt9E_	Alignment	not modelled	5.7	27	PDB header: photosynthesis Chain: E: PDB Molecule: cytochrome b6-f complex subunit 6; PDBTitle: crystal structure of the cytochrome b6f complex from nostoc sp. pcc2 7120
82	c2xpnA_	Alignment	not modelled	5.7	26	PDB header: transcription Chain: A: PDB Molecule: iws1; PDBTitle: crystal structure of a spt6-iws1(spn1) complex from2 encephalitozoon cuniculi, form i
83	c3h6pD_	Alignment	not modelled	5.7	32	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: esat-6-like protein esxr; PDBTitle: crystal structure of rv3019c-rv3020c from mycobacterium tuberculosis
84	d4htci_	Alignment	not modelled	5.7	32	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Leech antihemostatic proteins Family: Hirudin-like
85	d1ojqa_	Alignment	not modelled	5.6	27	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: ADP-ribosylating toxins
86	c1kdhA_	Alignment	not modelled	5.6	27	PDB header: transferase/dna Chain: A: PDB Molecule: terminal deoxynucleotidyltransferase short PDBTitle: binary complex of murine terminal deoxynucleotidyl2 transferase with a primer single stranded dna
87	c1f93H_	Alignment	not modelled	5.5	25	PDB header: transcription Chain: H: PDB Molecule: hepatocyte nuclear factor 1-alpha; PDBTitle: crystal structure of a complex between the dimerization2 domain of hnf-1 alpha and the coactivator dcoh
88	c3i3nA_	Alignment	not modelled	5.4	19	PDB header: protein binding Chain: A: PDB Molecule: kelch-like protein 11; PDBTitle: crystal structure of the btb-back domains of human klh11
89	d1dan13	Alignment	not modelled	5.4	58	Fold: GLA-domain Superfamily: GLA-domain Family: GLA-domain
90	d1afwa2	Alignment	not modelled	5.4	26	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
91	d1f93f_	Alignment	not modelled	5.4	25	Fold: Dimerisation interlock Superfamily: Dimerization cofactor of HNF-1 alpha Family: Dimerization cofactor of HNF-1 alpha
92	c1f93F_	Alignment	not modelled	5.4	25	PDB header: transcription Chain: F: PDB Molecule: hepatocyte nuclear factor 1-alpha; PDBTitle: crystal structure of a complex between the dimerization2 domain of hnf-1 alpha and the coactivator dcoh
93	d1jb0j_	Alignment	not modelled	5.4	63	Fold: Single transmembrane helix Superfamily: Subunit IX of photosystem I reaction centre, Psaj Family: Subunit IX of photosystem I reaction centre, Psaj
94	d1iooa_	Alignment	not modelled	5.4	16	Fold: Ribonuclease Rh-like Superfamily: Ribonuclease Rh-like Family: Ribonuclease Rh-like
95	d1bgfa_	Alignment	not modelled	5.3	27	Fold: Transcription factor STAT-4 N-domain Superfamily: Transcription factor STAT-4 N-domain Family: Transcription factor STAT-4 N-domain
96	c1f93G_	Alignment	not modelled	5.3	25	PDB header: transcription Chain: G: PDB Molecule: hepatocyte nuclear factor 1-alpha; PDBTitle: crystal structure of a complex between the dimerization2 domain of hnf-1 alpha and the coactivator dcoh
97	d1jqra_	Alignment	not modelled	5.3	20	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
98	c3ol4B_	Alignment	not modelled	5.3	46	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
99	d2huga1	Alignment	not modelled	5.3	56	Fold: SH3-like barrel Superfamily: Chromo domain-like Family: Chromo domain