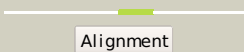

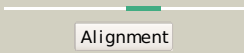
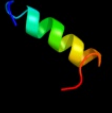


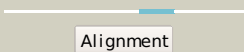

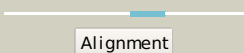

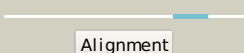

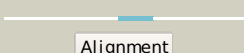

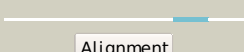

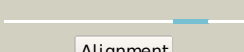
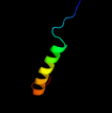
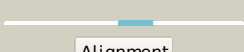
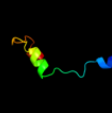
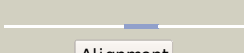
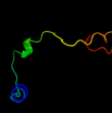


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P76361
Date	Thu Jan 5 12:22:20 GMT 2012
Unique Job ID	6065ac5873f4750b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	dlvlpal	 Alignment		61.7	26	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: Monomeric nicotinate phosphoribosyltransferase N-terminal domain-like
2	dlus7b_	 Alignment		45.1	32	Fold: Hsp90 co-chaperone CDC37 Superfamily: Hsp90 co-chaperone CDC37 Family: Hsp90 co-chaperone CDC37
3	clus7B_	 Alignment		45.1	32	PDB header: chaperone Chain: B: PDB Molecule: hsp90 co-chaperone cdc37; PDBTitle: complex of hsp90 and p50
4	c2puyA_	 Alignment		39.5	26	PDB header: transcription Chain: A: PDB Molecule: phd finger protein 21a; PDBTitle: crystal structure of the bhc80 phd finger
5	d2f7fa2	 Alignment		35.7	25	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: NadC N-terminal domain-like
6	dlk0ga_	 Alignment		33.6	17	Fold: ADC synthase Superfamily: ADC synthase Family: ADC synthase
7	dlybea2	 Alignment		33.2	26	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: Monomeric nicotinate phosphoribosyltransferase N-terminal domain-like
8	dli7ga_	 Alignment		32.7	17	Fold: ADC synthase Superfamily: ADC synthase Family: ADC synthase
9	dli1ga_	 Alignment		31.5	16	Fold: ADC synthase Superfamily: ADC synthase Family: ADC synthase
10	clvlpA_	 Alignment		30.0	26	PDB header: transferase Chain: A: PDB Molecule: nicotinate phosphoribosyltransferase; PDBTitle: crystal structure of a putative nicotinate phosphoribosyltransferase2 (yor209c, npt1) from saccharomyces cerevisiae at 1.75 a resolution
11	dli96a_	 Alignment		29.9	26	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)

12	d1weqa_	Alignment		28.6	24	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: PHD domain
13	d1q5ma_	Alignment		28.3	33	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)
14	d1zbdb_	Alignment		26.9	26	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: FYVE, a phosphatidylinositol-3-phosphate binding domain
15	d1yira2	Alignment		26.6	27	Fold: alpha/beta-Hammerhead Superfamily: Nicotinate/Quinolinate PRTase N-terminal domain-like Family: Monomeric nicotinate phosphoribosyltransferase N-terminal domain-like
16	d1ah4a_	Alignment		25.2	33	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)
17	c3o37D_	Alignment		24.0	38	PDB header: transcription/protein binding Chain: D: PDB Molecule: transcription intermediary factor 1-alpha; PDBTitle: crystal structure of trim24 phd-bromo complexed with h3(1-10)k42 peptide
18	d2alra_	Alignment		22.6	29	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)
19	d1hqta_	Alignment		21.8	32	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)
20	d3ctaa2	Alignment		21.5	22	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin kinase-like Family: CTP-dependent riboflavin kinase-like
21	c2riqA_	Alignment	not modelled	20.6	28	PDB header: transferase Chain: A: PDB Molecule: poly [adp-ribose] polymerase 1; PDBTitle: crystal structure of the third zinc-binding domain of human parp-1
22	c3b4sA_	Alignment	not modelled	20.0	56	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein luxt; PDBTitle: crystal structure of a luxt domain from vibrio2 parahaemolyticus rimd 2210633
23	d1mn4a_	Alignment	not modelled	19.6	45	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: p53-like transcription factors Family: DNA-binding domain from NDT80
24	c1yj7A_	Alignment	not modelled	19.5	19	PDB header: protein transport Chain: A: PDB Molecule: escj; PDBTitle: crystal structure of enteropathogenic e.coli (epec) type iii secretion2 system protein escj
25	c2obnA_	Alignment	not modelled	19.2	26	PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a duf1611 family protein (ava_3511) from anabaena2 variabilis atcc 29413 at 2.30 a resolution
26	c1xwhA_	Alignment	not modelled	19.2	41	PDB header: transcription Chain: A: PDB Molecule: autoimmune regulator; PDBTitle: nmr structure of the first phd finger of autoimmune2 regulator protein (aire1): insights into apeced
27	c2jvnA_	Alignment	not modelled	18.7	30	PDB header: transferase Chain: A: PDB Molecule: poly [adp-ribose] polymerase 1; PDBTitle: domain c of human parp-1
28	d2g5fa1	Alignment	not modelled	16.8	10	Fold: ADC synthase Superfamily: ADC synthase Family: ADC synthase
						Fold: Inhibitor of apoptosis (IAP) repeat

29	dlq4qa_	Alignment	not modelled	15.6	21	Superfamily: Inhibitor of apoptosis (IAP) repeat Family: Inhibitor of apoptosis (IAP) repeat
30	dliega_	Alignment	not modelled	15.2	39	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
31	c3mhsE_	Alignment	not modelled	15.0	33	PDB header: hydrolase/transcription regulator/protei Chain: E: PDB Molecule: saga-associated factor 73; PDBTitle: structure of the saga ubp8/sgf11/sus1/sgf73 dub module bound to2 ubiquitin aldehyde
32	c3h9mA_	Alignment	not modelled	14.8	21	PDB header: lyase Chain: A: PDB Molecule: p-aminobenzoate synthetase, component i; PDBTitle: crystal structure of para-aminobenzoate synthetase,2 component i from cytophaga hutchinsonii
33	d2p6ra2	Alignment	not modelled	14.6	26	Fold: Sec63 N-terminal domain-like Superfamily: Sec63 N-terminal domain-like Family: Achaeal helicase C-terminal domain
34	dlafsa_	Alignment	not modelled	14.4	28	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)
35	c2im5C_	Alignment	not modelled	14.3	26	PDB header: transferase Chain: C: PDB Molecule: nicotinate phosphoribosyltransferase; PDBTitle: crystal structure of nicotinate phosphoribosyltransferase2 from porphyromonas gingivalis
36	dlat3a_	Alignment	not modelled	14.0	19	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
37	c2f6nA_	Alignment	not modelled	13.7	21	PDB header: transcription Chain: A: PDB Molecule: bromodomain phd finger transcription factor; PDBTitle: crystal structure of phd finger-linker-bromodomain fragment2 of human bptf in the free form
38	d2g0ta1	Alignment	not modelled	13.7	24	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
39	dlus0a_	Alignment	not modelled	13.3	38	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)
40	c2i6yA_	Alignment	not modelled	13.3	10	PDB header: lyase Chain: A: PDB Molecule: anthranilate synthase component i, putative; PDBTitle: structure and mechanism of mycobacterium tuberculosis salicylate2 synthase, mbt
41	c2fqxA_	Alignment	not modelled	13.3	22	PDB header: transport protein Chain: A: PDB Molecule: membrane lipoprotein tmpc; PDBTitle: pnra from treponema pallidum complexed with guanosine
42	c2f7fA_	Alignment	not modelled	13.3	25	PDB header: transferase Chain: A: PDB Molecule: nicotinate phosphoribosyltransferase, putative; PDBTitle: crystal structure of enterococcus faecalis putative nicotinate2 phosphoribosyltransferase, new york structural genomics consortium
43	d2pbka1	Alignment	not modelled	13.1	32	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
44	dlubdc2	Alignment	not modelled	13.0	38	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
45	c2l43A_	Alignment	not modelled	12.7	19	PDB header: transcription Chain: A: PDB Molecule: n-terminal domain from histone h3.3, linker, phd1 domain PDBTitle: structural basis for histone code recognition by brpf2-phd1 finger
46	c2bs5A_	Alignment	not modelled	12.5	47	PDB header: sugar binding protein Chain: A: PDB Molecule: fucose-binding lectin protein; PDBTitle: lectin from ralstonia solanacearum complexed with 2-2 fucosyllactose
47	d3efxd1	Alignment	not modelled	12.4	43	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
48	dlvzva_	Alignment	not modelled	12.4	21	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
49	dlvqow1	Alignment	not modelled	12.4	13	Fold: Ribosomal protein L30p/L7e Superfamily: Ribosomal protein L30p/L7e Family: Ribosomal protein L30p/L7e
50	c3bu8B_	Alignment	not modelled	11.8	16	PDB header: dna binding protein Chain: B: PDB Molecule: telomeric repeat-binding factor 2; PDBTitle: crystal structure of trf2 trfh domain and tin2 peptide2 complex
51	dlqdlA_	Alignment	not modelled	11.6	18	Fold: ADC synthase Superfamily: ADC synthase Family: ADC synthase
52	dlx3ha2	Alignment	not modelled	11.3	36	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
53	c3pstA_	Alignment	not modelled	11.1	17	PDB header: nuclear protein Chain: A: PDB Molecule: protein doa1; PDBTitle: crystal structure of pul and pfu(mutate) domain
54	dlxg8a_	Alignment	not modelled	11.0	83	Fold: Thioredoxin fold Superfamily: Thioredoxin-like

						Family: YuzD-like
55	d2olua1	Alignment	not modelled	10.9	10	Fold: Lysozyme-like Superfamily: Lysozyme-like Family: PBP transglycosylase domain-like
56	c3d6zA	Alignment	not modelled	10.6	33	PDB header: transcription regulator/dna Chain: A: PDB Molecule: multidrug-efflux transporter 1 regulator; PDBTitle: crystal structure of r275e mutant of bmrr bound to dna and rhodamine
57	c2euzA	Alignment	not modelled	10.6	50	PDB header: cell cycle/dna Chain: A: PDB Molecule: ndt80 protein; PDBTitle: structure of a ndt80-dna complex (mse mutant mc5t)
58	d1mnna	Alignment	not modelled	10.6	50	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: p53-like transcription factors Family: DNA-binding domain from NDT80
59	c3elfA	Alignment	not modelled	10.5	20	PDB header: lyase Chain: A: PDB Molecule: fructose-bisphosphate aldolase; PDBTitle: structural characterization of tetrameric mycobacterium tuberculosis2 fructose 1,6-bisphosphate aldolase - substrate binding and catalysis3 mechanism of a class iia bacterial aldolase
60	d1o6ea	Alignment	not modelled	10.0	29	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
61	d3chbd	Alignment	not modelled	10.0	44	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
62	c3ln3A	Alignment	not modelled	10.0	39	PDB header: oxidoreductase Chain: A: PDB Molecule: dihydrodiol dehydrogenase; PDBTitle: crystal structure of putative reductase (np_038806.2) from2 mus musculus at 1.18 a resolution
63	c2krca	Alignment	not modelled	9.6	43	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
64	c2ysmA	Alignment	not modelled	9.5	23	PDB header: transferase Chain: A: PDB Molecule: myeloid/lymphoid or mixed-lineage leukemia PDBTitle: solution structure of the first and second phd domain from2 myeloid/lymphoid or mixed-lineage leukemia protein 33 homolog
65	c2w0tA	Alignment	not modelled	9.4	31	PDB header: transcription Chain: A: PDB Molecule: lethal(3)malignant brain tumor-like 2 protein; PDBTitle: solution structure of the fcs zinc finger domain of human2 lmb12
66	c2l7pA	Alignment	not modelled	9.3	13	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase ashh2; PDBTitle: ashh2 a cw domain
67	c2a20A	Alignment	not modelled	9.3	26	PDB header: metal binding protein Chain: A: PDB Molecule: regulating synaptic membrane exocytosis protein PDBTitle: solution structure of rim2 zinc finger domain
68	c2e6rA	Alignment	not modelled	9.3	24	PDB header: dna binding protein Chain: A: PDB Molecule: jumonji/arid domain-containing protein 1d; PDBTitle: solution structure of the phd domain in smcy protein
69	d1npba	Alignment	not modelled	9.0	31	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Antibiotic resistance proteins
70	c3os6A	Alignment	not modelled	9.0	17	PDB header: isomerase Chain: A: PDB Molecule: isochorismate synthase dhbc; PDBTitle: crystal structure of putative 2,3-dihydroxybenzoate-specific2 isochorismate synthase, dhbc from bacillus anthracis.
71	d1olma1	Alignment	not modelled	8.7	20	Fold: RuvA C-terminal domain-like Superfamily: CRAL/TRIO N-terminal domain Family: CRAL/TRIO N-terminal domain
72	d2af7a1	Alignment	not modelled	8.6	16	Fold: AhpD-like Superfamily: AhpD-like Family: CMD-like
73	d1kjna	Alignment	not modelled	8.4	29	Fold: Hypothetical protein MTH777 (MT0777) Superfamily: Hypothetical protein MTH777 (MT0777) Family: Hypothetical protein MTH777 (MT0777)
74	d2h1ta1	Alignment	not modelled	8.3	27	Fold: Spiral beta-roll Superfamily: PA1994-like Family: PA1994-like
75	d1c8aa2	Alignment	not modelled	8.2	35	Fold: beta-clip Superfamily: AFP III-like domain Family: AFP III-like domain
76	d1l0nk	Alignment	not modelled	8.2	33	Fold: Single transmembrane helix Superfamily: Subunit XI (6.4 kDa protein) of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Family: Subunit XI (6.4 kDa protein) of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
77	d1i8ta1	Alignment	not modelled	8.0	31	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: UDP-galactopyranose mutase, N-terminal domain
78	d2bv3a5	Alignment	not modelled	7.9	17	Fold: Ferredoxin-like Superfamily: EF-G C-terminal domain-like Family: EF-G/eEF-2 domains III and V
						PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase

79	c2wghA_	Alignment	not modelled	7.9	24	large PDBTitle: human ribonucleotide reductase r1 subunit (rrm1) in complex2 with datp and mg.
80	d2ezla_	Alignment	not modelled	7.8	36	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
81	c4a1cV_	Alignment	not modelled	7.6	16	PDB header: ribosome Chain: V: PDB Molecule: 60s ribosomal protein l7; PDBTitle: t.thermophila 60s ribosomal subunit in complex with2 initiation factor 6. this file contains 5s rrna,3 5.8s rrna and proteins of molecule 4.
82	c2zkr2_	Alignment	not modelled	7.6	60	PDB header: ribosomal protein/rna Chain: 2: PDB Molecule: 60s ribosomal protein l37e; PDBTitle: structure of a mammalian ribosomal 60s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
83	d2fyuk1	Alignment	not modelled	7.6	39	Fold: Single transmembrane helix Superfamily: Subunit XI (6.4 kDa protein) of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase) Family: Subunit XI (6.4 kDa protein) of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
84	c2cvuA_	Alignment	not modelled	7.6	32	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase large chain PDBTitle: structures of yeast ribonucleotide reductase i
85	c3p5rB_	Alignment	not modelled	7.4	23	PDB header: lyase Chain: B: PDB Molecule: taxadiene synthase; PDBTitle: crystal structure of taxadiene synthase from pacific yew (taxus2 brevifolia) in complex with mg2+ and 2-fluorogeranylgeranyl3 diphosphate
86	c3r1rB_	Alignment	not modelled	7.4	28	PDB header: complex (oxidoreductase/peptide) Chain: B: PDB Molecule: ribonucleotide reductase r1 protein; PDBTitle: ribonucleotide reductase r1 protein with amppnp occupying2 the activity site from escherichia coli
87	c3jueA_	Alignment	not modelled	7.4	32	PDB header: protein transport/endocytosis Chain: A: PDB Molecule: arfgap with coiled-coil, ank repeat and ph domain- PDBTitle: crystal structure of arfgap and ank repeat domain of acap1
88	d2yt9a1	Alignment	not modelled	7.3	63	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
89	c1s1iY_	Alignment	not modelled	7.2	80	PDB header: ribosome Chain: Y: PDB Molecule: 60s ribosomal protein l37-a; PDBTitle: structure of the ribosomal 80s-eef2-sordarin complex from2 yeast obtained by docking atomic models for rna and protein3 components into a 11.7 a cryo-em map. this file, 1s1i,4 contains 60s subunit. the 40s ribosomal subunit is in file5 1s1h.
90	c3jywY_	Alignment	not modelled	7.2	80	PDB header: ribosome Chain: Y: PDB Molecule: 60s ribosomal protein l37(a); PDBTitle: structure of the 60s proteins for eukaryotic ribosome based on cryo-em2 map of thermomyces lanuginosus ribosome at 8.9a resolution
91	c2olvA_	Alignment	not modelled	7.1	9	PDB header: transferase Chain: A: PDB Molecule: penicillin-binding protein 2; PDBTitle: structural insight into the transglycosylation step of bacterial cell2 wall biosynthesis : donor ligand complex
92	d1b8da_	Alignment	not modelled	7.1	28	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
93	c3fehA_	Alignment	not modelled	7.1	38	PDB header: hydrolase activator Chain: A: PDB Molecule: centaurin-alpha-1; PDBTitle: crystal structure of full length centaurin alpha-1
94	c3k7bA_	Alignment	not modelled	7.0	36	PDB header: viral protein Chain: A: PDB Molecule: protein a33; PDBTitle: the structure of the poxvirus a33 protein reveals a dimer of unique c-2 type lectin-like domains.
95	d1xp3a1	Alignment	not modelled	6.9	22	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: Endonuclease IV
96	d1mm2a_	Alignment	not modelled	6.9	31	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: PHD domain
97	d1bb8a_	Alignment	not modelled	6.8	33	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: DNA-binding domain from tn916 integrase
98	d1zina2	Alignment	not modelled	6.8	71	Fold: Rubredoxin-like Superfamily: Microbial and mitochondrial ADK, insert "zinc finger" domain Family: Microbial and mitochondrial ADK, insert "zinc finger" domain
99	c1ybeA_	Alignment	not modelled	6.7	23	PDB header: transferase Chain: A: PDB Molecule: nicotinate phosphoribosyltransferase; PDBTitle: crystal structure of a nicotinate phosphoribosyltransferase