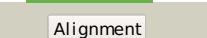
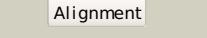
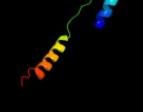
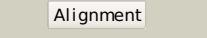
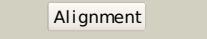
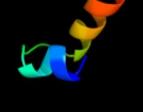
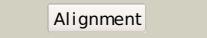
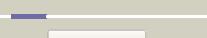


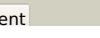
Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P06972
Date	Thu Jan 5 10:59:37 GMT 2012
Unique Job ID	c10a195fbc2cd4c0

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1l7va_			100.0	27	Fold: ABC transporter involved in vitamin B12 uptake, BtuC Superfamily: ABC transporter involved in vitamin B12 uptake, BtuC Family: ABC transporter involved in vitamin B12 uptake, BtuC
2	c2nq2A_			100.0	27	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.
3	d1otsa_			51.2	11	Fold: Clc chloride channel Superfamily: Clc chloride channel Family: Clc chloride channel
4	d1kpla_			46.2	14	Fold: Clc chloride channel Superfamily: Clc chloride channel Family: Clc chloride channel
5	c3k3gA_			38.0	11	PDB header: transport protein Chain: A: PDB Molecule: urea transporter; PDBTitle: crystal structure of the urea transporter from desulfovibrio vulgaris2 bound to 1,3-dimethylurea
6	c1yceD_			27.6	14	PDB header: membrane protein Chain: D: PDB Molecule: subunit c; PDBTitle: structure of the rotor ring of f-type na+-atpase from illyobacter2 tartaricus
7	c1q1hA_			22.2	23	PDB header: transcription Chain: A: PDB Molecule: transcription factor e; PDBTitle: an extended winged helix domain in general transcription2 factor e/ie alpha
8	d1q1ha_			22.2	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Transcription factor E/Ile-alpha, N-terminal domain
9	c2ht2B_			20.9	12	PDB header: membrane protein Chain: B: PDB Molecule: h(+)/cl(-) exchange transporter clca; PDBTitle: structure of the escherichia coli clc chloride channel2 y445h mutant and fab complex
10	c2w5jM_			18.6	20	PDB header: hydrolase Chain: M: PDB Molecule: atp synthase c chain, chloroplastic; PDBTitle: structure of the c14-rotor ring of the proton translocating2 chloroplast atp synthase
11	c2xndK_			17.5	21	PDB header: hydrolase Chain: K: PDB Molecule: atp synthase lipid-binding protein, mitochondrial; PDBTitle: crystal structure of bovine f1-c8 sub-complex of atp2 synthase

12	d2p7tc1			16.6	34	Fold: Voltage-gated potassium channels Superfamily: Voltage-gated potassium channels Family: Voltage-gated potassium channels
13	c3lrcC_			15.3	7	PDB header: transport protein Chain: C: PDB Molecule: arginine/agmatine antiporter; PDBTitle: structure of e. coli adic (p1)
14	c2b2hA_			15.3	13	PDB header: transport protein Chain: A: PDB Molecule: ammonium transporter; PDBTitle: ammonium transporter amt-1 from a. fulgidus (as)
15	c2wpdP_			14.5	23	PDB header: hydrolase Chain: P: PDB Molecule: atp synthase subunit 9, mitochondrial; PDBTitle: the mg.adp inhibited state of the yeast f1c10 atp synthase
16	c3qnqD_			14.4	7	PDB header: membrane protein, transport protein Chain: D: PDB Molecule: pts system, cellobiose-specific iic component; PDBTitle: crystal structure of the transporter chbc, the iic component from the 2 n,n'-diacetylchitobiose-specific phosphotransferase system
17	d2r5fa1			13.5	33	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
18	c2kncA_			12.3	32	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iib; PDBTitle: platelet integrin alfa1b-beta3 transmembrane-cytoplasmic2 heterocomplex
19	c2x2vG_			12.0	18	PDB header: membrane protein Chain: G: PDB Molecule: atp synthase subunit c; PDBTitle: structural basis of a novel proton-coordination type in an2 f1f0-atp synthase rotor ring
20	d1y88a1			11.6	21	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: Hypothetical protein AF1548, C-terminal domain
21	c2zt9E_		not modelled	11.5	34	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
22	c2o012_		not modelled	11.2	48	PDB header: photosynthesis Chain: 2: PDB Molecule: type ii chlorophyll a/b binding protein from PDBTitle: the structure of a plant photosystem i supercomplex at 3.42 angstrom resolution
23	c3a03A_		not modelled	11.1	11	PDB header: gene regulation Chain: A: PDB Molecule: t-cell leukemia homeobox protein 2; PDBTitle: crystal structure of hox11l1 homeodomain
24	c2jd3B_		not modelled	10.8	33	PDB header: dna binding protein Chain: B: PDB Molecule: sttb protein; PDBTitle: parr from plasmid pb171
25	d1du0a_		not modelled	10.6	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
26	d1x2ma1		not modelled	10.5	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
27	c3mk7F_		not modelled	10.5	11	PDB header: oxidoreductase Chain: F: PDB Molecule: cytochrome c oxidase, cbb3-type, subunit p; PDBTitle: the structure of cbb3 cytochrome oxidase
28	c2kf5A_		not modelled	10.4	28	PDB header: dna-binding protein Chain: A: PDB Molecule: conserved hypothetical regulatory protein; PDBTitle: nmr structure of rv2175c

29	d1ku2a1		Alignment	not modelled	10.4	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma3 domain
30	d1rh5b_		Alignment	not modelled	10.3	33	Fold: Single transmembrane helix Superfamily: Preprotein translocase SecE subunit Family: Preprotein translocase SecE subunit
31	c1ijjA_		Alignment	not modelled	10.0	35	PDB header: signaling protein Chain: A: PDB Molecule: erbb-2 receptor protein-tyrosine kinase; PDBTitle: solution structure of the neu/erbb-2 membrane spanning2 segment
32	c2vi6F_		Alignment	not modelled	9.6	11	PDB header: transcription Chain: F: PDB Molecule: homeobox protein nanog; PDBTitle: crystal structure of the nanog homeodomain
33	c1l0oC_		Alignment	not modelled	9.6	28	PDB header: protein binding Chain: C: PDB Molecule: sigma factor; PDBTitle: crystal structure of the bacillus stearothermophilus anti-2 sigma factor spoIab with the sporulation sigma factor3 sigmaf
34	d1l0oc_		Alignment	not modelled	9.6	28	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
35	c3cmwA_		Alignment	not modelled	9.5	27	PDB header: recombination/dna Chain: A: PDB Molecule: protein recA; PDBTitle: mechanism of homologous recombination from the recA2 ssDNA/dsDNA structures
36	d2p7vb1		Alignment	not modelled	9.4	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
37	c2da4A_		Alignment	not modelled	9.4	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein dkfpz686k21156; PDBTitle: solution structure of the homeobox domain of the2 hypothetical protein, dkfpz686k21156
38	c1fftG_		Alignment	not modelled	9.4	5	PDB header: oxidoreductase Chain: G: PDB Molecule: ubiquinol oxidase; PDBTitle: the structure of ubiquinol oxidase from escherichia coli
39	c2xglB_		Alignment	not modelled	9.3	18	PDB header: antibiotic Chain: B: PDB Molecule: colicin-m immunity protein; PDBTitle: the x-ray structure of the escherichia coli colicin m immunity2 protein demonstrates the presence of a disulphide bridge, which is3 functionally essential
40	c3nd0A_		Alignment	not modelled	9.3	10	PDB header: transport protein Chain: A: PDB Molecule: sli0855 protein; PDBTitle: x-ray crystal structure of a slow cyanobacterial cl-/h+ antiporter
41	c2jwaA_		Alignment	not modelled	9.3	18	PDB header: transferase Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-2; PDBTitle: erbb2 transmembrane segment dimer spatial structure
42	d1rp3a1		Alignment	not modelled	9.3	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma3 domain
43	d1akha_		Alignment	not modelled	9.2	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
44	d1sana_		Alignment	not modelled	9.1	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
45	c1yi7C_		Alignment	not modelled	8.9	31	PDB header: hydrolase Chain: C: PDB Molecule: beta-xylosidase, family 43 glycosyl hydrolase; PDBTitle: beta-D-xylosidase (selenomethionine) xynd from clostridium2 acetobutylicum
46	d1ku3a_		Alignment	not modelled	8.9	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
47	c3aqpB_		Alignment	not modelled	8.8	21	PDB header: membrane protein Chain: B: PDB Molecule: probable secdf protein-export membrane protein; PDBTitle: crystal structure of secdf, a translocon-associated membrane protein, 2 from thermus thermophilus
48	c2kz3A_		Alignment	not modelled	8.8	24	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein rad513; PDBTitle: backbone 1h, 13c, and 15n chemical shift assignments for human rad51d2 from 1 to 83
49	d2o34a1		Alignment	not modelled	8.7	20	Fold: T-fold Superfamily: ApbE-like Family: DVU1097-like
50	c1wu0A_		Alignment	not modelled	8.5	22	PDB header: hydrolase Chain: A: PDB Molecule: atp synthase c chain; PDBTitle: solution structure of subunit c of f1fo-atp synthase from2 the thermophilic bacillus ps3
51	d1wh5a_		Alignment	not modelled	8.5	6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
52	d1le8a_		Alignment	not modelled	8.5	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
53	d1ttya_		Alignment	not modelled	8.4	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
54	d1p7ia_		Alignment	not modelled	8.4	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like

					Family: Homeodomain
55	d2p81a1	Alignment	not modelled	8.3	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
56	c3t72o	Alignment	not modelled	8.3	PDB header: transcription/dna Chain: O: PDB Molecule: pho box dna (strand 1); PDBTitle: phob(e)-sigma70(4)-(rnap-beta-flap-tip-helix)-dna transcription2 activation sub-complex
57	d2asba2	Alignment	not modelled	8.2	Fold: Alpha-lytic protease prodomain-like Superfamily: Prokaryotic type KH domain (KH-domain type II) Family: Prokaryotic type KH domain (KH-domain type II)
58	c3k69A	Alignment	not modelled	8.2	PDB header: transcription Chain: A: PDB Molecule: putative transcription regulator; PDBTitle: crystal structure of a putative transcriptional regulator (lp_0360)2 from lactobacillus plantarum at 1.95 a resolution
59	c2da7A	Alignment	not modelled	8.2	PDB header: dna binding protein Chain: A: PDB Molecule: zinc finger homeobox protein 1b; PDBTitle: solution structure of the homeobox domain of zinc finger2 homeobox protein 1b (smad interacting protein 1)
60	c2xvtC	Alignment	not modelled	8.2	PDB header: membrane protein Chain: C: PDB Molecule: receptor activity-modifying protein 2; PDBTitle: structure of the extracellular domain of human ramp2
61	c2k1aA	Alignment	not modelled	8.2	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iib; PDBTitle: bicelle-embedded integrin alpha(iib) transmembrane segment
62	d1b8ia	Alignment	not modelled	8.1	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
63	c2jmlA	Alignment	not modelled	8.1	PDB header: transcription Chain: A: PDB Molecule: dna binding domain/transcriptional regulator; PDBTitle: solution structure of the n-terminal domain of cara repressor
64	d1rhzb	Alignment	not modelled	8.0	Fold: Single transmembrane helix Superfamily: Preprotein translocase SecE subunit Family: Preprotein translocase SecE subunit
65	d1mylb	Alignment	not modelled	8.0	Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: Arc/Mnt-like phage repressors
66	d1o4xa1	Alignment	not modelled	7.9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
67	d1ku7a	Alignment	not modelled	7.9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
68	d1rc2a	Alignment	not modelled	7.9	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
69	c2djnA	Alignment	not modelled	7.9	PDB header: transcription Chain: A: PDB Molecule: homeobox protein dlx-5; PDBTitle: the solution structure of the homeobox domain of human2 homeobox protein dlx-5
70	d1bw5a	Alignment	not modelled	7.8	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
71	d1f43a	Alignment	not modelled	7.8	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
72	c2rn7A	Alignment	not modelled	7.7	PDB header: unknown function Chain: A: PDB Molecule: is629 orfa; PDBTitle: nmr solution structure of tpe protein from shigella2 flexneri. northeast structural genomics target sfr125
73	c2l2tA	Alignment	not modelled	7.7	PDB header: membrane protein Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbB-4; PDBTitle: solution nmr structure of the erbB4 dimeric membrane domain
74	c2o8xA	Alignment	not modelled	7.7	PDB header: transcription Chain: A: PDB Molecule: probable rna polymerase sigma-c factor; PDBTitle: crystal structure of the "-35 element" promoter recognition domain of2 mycobacterium tuberculosis sigc
75	c2k40A	Alignment	not modelled	7.6	PDB header: dna binding protein Chain: A: PDB Molecule: homeobox expressed in es cells 1; PDBTitle: nmr structure of hesx-1 homeodomain double mutant r311/e421
76	c3cmuA	Alignment	not modelled	7.6	PDB header: recombination/dna Chain: A: PDB Molecule: protein reca; PDBTitle: mechanism of homologous recombination from the reca-2 ssdna/ds dna structures
77	d1f6ga	Alignment	not modelled	7.6	Fold: Voltage-gated potassium channels Superfamily: Voltage-gated potassium channels Family: Voltage-gated potassium channels
78	d1pufa	Alignment	not modelled	7.6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
79	d1s7ea1	Alignment	not modelled	7.6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
80	d1b72a	Alignment	not modelled	7.6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain

81	c2kv5A		Alignment	not modelled	7.6	20	PDB header: toxin Chain: A; PDB Molecule: putative uncharacterized protein rna1; PDBTitle: solution structure of the par toxin fst in dpc micelles
82	d2craa1		Alignment	not modelled	7.5	6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
83	d1zq3p1		Alignment	not modelled	7.5	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
84	c2x48B		Alignment	not modelled	7.5	22	PDB header: viral protein Chain: B; PDB Molecule: cag38821; PDBTitle: orf 55 from sulfolobus islandicus rudivirus 1
85	d2hi3a1		Alignment	not modelled	7.5	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
86	c3u5eL		Alignment	not modelled	7.4	26	PDB header: ribosome Chain: L; PDB Molecule: 60s ribosomal protein l13-a; PDBTitle: the structure of the eukaryotic ribosome at 3.0 resolution
87	c2wwbB		Alignment	not modelled	7.4	28	PDB header: ribosome Chain: B; PDB Molecule: protein transport protein sec61 subunit gamma; PDBTitle: cryo-em structure of the mammalian sec61 complex bound to the2 actively translating wheat germ 80s ribosome
88	c3a01A		Alignment	not modelled	7.3	17	PDB header: gene regulation/dna Chain: A; PDB Molecule: homeodomain-containing protein; PDBTitle: crystal structure of aristless and clawless homeodomains bound to dna
89	d1s9ca1		Alignment	not modelled	7.3	15	Fold: Thioesterase/thiol ester dehydrase-isomerase Superfamily: Thioesterase/thiol ester dehydrase-isomerase Family: MaoC-like
90	d1l8qa1		Alignment	not modelled	7.3	6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Chromosomal replication initiation factor DnaA C-terminal domain IV
91	d1js2a		Alignment	not modelled	7.3	25	Fold: HIPIP (high potential iron protein) Superfamily: HIPIP (high potential iron protein) Family: HIPIP (high potential iron protein)
92	c2yx8A		Alignment	not modelled	7.3	25	PDB header: protein transport Chain: A; PDB Molecule: receptor activity-modifying protein 1; PDBTitle: crystal structure of the extracellular domain of human ramp1
93	d1ocpa		Alignment	not modelled	7.3	28	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
94	d1myka		Alignment	not modelled	7.3	38	Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: Arc/Mnt-like phage repressors
95	d1smyf2		Alignment	not modelled	7.2	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
96	c4a18U		Alignment	not modelled	7.2	21	PDB header: ribosome Chain: U; PDB Molecule: rpl13; PDBTitle: t thermophila 60s ribosomal subunit in complex with initiation2 factor 6. this file contains 26s rrna and proteins of molecule 1
97	d1yz8p1		Alignment	not modelled	7.2	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
98	d2dt5a1		Alignment	not modelled	7.1	6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Transcriptional repressor Rex, N-terminal domain
99	c2dmsA		Alignment	not modelled	7.1	22	PDB header: dna binding protein Chain: A; PDB Molecule: homeobox protein otx2; PDBTitle: solution structure of the homeobox domain of homeobox2 protein otx2