




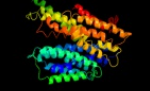


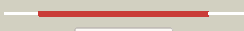






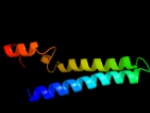

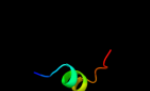




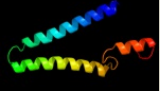
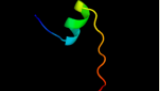






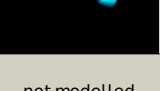


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0AGF4
Date	Thu Jan 5 11:28:58 GMT 2012
Unique Job ID	e921f1771acff438

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1pw4a_	 Alignment		100.0	12	Fold: MFS general substrate transporter Superfamily: MFS general substrate transporter Family: Glycerol-3-phosphate transporter
2	c3o7pA_	 Alignment		99.9	12	PDB header: transport protein Chain: A: PDB Molecule: l-fucose-proton symporter; PDBTitle: crystal structure of the e.coli fucose:proton symporter, fucp (n162a)
3	c2xutC_	 Alignment		99.9	10	PDB header: transport protein Chain: C: PDB Molecule: proton/peptide symporter family protein; PDBTitle: crystal structure of a proton dependent oligopeptide (pot)2 family transporter.
4	d1pv7a_	 Alignment		99.9	11	Fold: MFS general substrate transporter Superfamily: MFS general substrate transporter Family: LacY-like proton/sugar symporter
5	c2gfpA_	 Alignment		99.9	12	PDB header: membrane protein Chain: A: PDB Molecule: multidrug resistance protein d; PDBTitle: structure of the multidrug transporter emrd from2 escherichia coli
6	d1fs1b1	 Alignment		40.9	46	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
7	c3ff5B_	 Alignment		34.0	33	PDB header: protein transport Chain: B: PDB Molecule: peroxisomal biogenesis factor 14; PDBTitle: crystal structure of the conserved n-terminal domain of the2 peroxisomal matrix-protein-import receptor, pex14p
8	c3nd0A_	 Alignment		28.5	18	PDB header: transport protein Chain: A: PDB Molecule: sli0855 protein; PDBTitle: x-ray crystal structure of a slow cyanobacterial cl-/h+ antiporter
9	d1fs2b1	 Alignment		25.8	35	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
10	c2w85A_	 Alignment		25.7	33	PDB header: protein transport Chain: A: PDB Molecule: peroxisomal membrane anchor protein pex14; PDBTitle: structure of pex14 in complex with pex19
11	d1nexa1	 Alignment		25.5	19	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like

12	c2ht2B_	Alignment		25.3	13	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
13	d2ovra1	Alignment		23.3	33	Fold: Skp1 dimerisation domain-like Superfamily: Skp1 dimerisation domain-like Family: Skp1 dimerisation domain-like
14	c3c9pA_	Alignment		20.3	31	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein sp1917; PDBTitle: crystal structure of uncharacterized protein sp1917
15	d1xpja_	Alignment		18.1	39	Fold: HAD-like Superfamily: HAD-like Family: Hypothetical protein VC0232
16	d1kpla_	Alignment		17.9	16	Fold: Clc chloride channel Superfamily: Clc chloride channel Family: Clc chloride channel
17	c2xc7A_	Alignment		17.6	12	PDB header: rna binding protein Chain: A: PDB Molecule: phosphorylated adapter rna export protein; PDBTitle: solution structure of phax-rbd in complex with ssrna
18	d1ofcx1	Alignment		15.0	33	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
19	d1y7oa1	Alignment		14.6	26	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Clp protease, ClpP subunit
20	c2g9pA_	Alignment		13.7	36	PDB header: antimicrobial protein Chain: A: PDB Molecule: antimicrobial peptide laticin 2a; PDBTitle: nmr structure of a novel antimicrobial peptide, laticin 2a,2 from spider (lachesana tarabaevi) venom
21	d1otsa_	Alignment	not modelled	12.7	13	Fold: Clc chloride channel Superfamily: Clc chloride channel Family: Clc chloride channel
22	d2a26a1	Alignment	not modelled	11.5	40	Fold: Long alpha-hairpin Superfamily: Calcyclin-binding protein-like Family: Siah interacting protein N terminal domain-like
23	d1agxa_	Alignment	not modelled	10.6	20	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
24	c3mmyF_	Alignment	not modelled	10.3	46	PDB header: nuclear protein Chain: F: PDB Molecule: nuclear pore complex protein nup98; PDBTitle: structural and functional analysis of the interaction between the2 nucleoporin nup98 and the mrna export factor rae1
25	c1cirA_	Alignment	not modelled	10.2	30	PDB header: serine protease inhibitor Chain: A: PDB Molecule: chymotrypsin inhibitor 2; PDBTitle: complex of two fragments of ci2 [(1-40)(dot)(41-64)]
26	c2p1nD_	Alignment	not modelled	9.7	33	PDB header: signaling protein Chain: D: PDB Molecule: skp1-like protein 1a; PDBTitle: mechanism of auxin perception by the tir1 ubiquitin ligase
27	c1egpA_	Alignment	not modelled	9.4	31	PDB header: proteinase inhibitor Chain: A: PDB Molecule: eglin-c; PDBTitle: proteinase inhibitor eglin c with hydrolysed reactive center
28	d2p7vb1	Alignment	not modelled	9.2	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain PDB header: transferase

29	c1pzmB_	Alignment	not modelled	8.7	19	Chain: B: PDB Molecule: hypoxanthine-guanine phosphoribosyltransferase; PDBTitle: crystal structure of hgprt-ase from leishmania tarentolae in complex2 with gmp
30	c1ysmA_	Alignment	not modelled	8.6	36	PDB header: metal binding protein Chain: A: PDB Molecule: calcyclin-binding protein; PDBTitle: nmr structure of n-terminal domain (residues 1-77) of siah-2 interacting protein.
31	d1ysma1	Alignment	not modelled	8.6	36	Fold: Long alpha-hairpin Superfamily: Calcyclin-binding protein-like Family: Siah interacting protein N terminal domain-like
32	c2f9jP_	Alignment	not modelled	8.6	35	PDB header: rna binding protein Chain: P: PDB Molecule: splicing factor 3b subunit 1; PDBTitle: 3.0 angstrom resolution structure of a y22m mutant of the spliceosomal2 protein p14 bound to a region of sf3b155
33	c1nexC_	Alignment	not modelled	8.6	19	PDB header: ligase, cell cycle Chain: C: PDB Molecule: centromere dna-binding protein complex cbf3 PDBTitle: crystal structure of scsdp1-sccdc4-cpd peptide complex
34	d1hh1a_	Alignment	not modelled	8.5	36	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Hjc-like
35	d2j85a1	Alignment	not modelled	8.5	14	Fold: STIV B116-like Superfamily: STIV B116-like Family: STIV B116-like
36	d1g9sa_	Alignment	not modelled	8.5	23	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
37	d1fsga_	Alignment	not modelled	8.4	33	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
38	d1x9na2	Alignment	not modelled	8.4	15	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: DNA ligase/mRNA capping enzyme postcatalytic domain
39	d1pzma_	Alignment	not modelled	8.3	19	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
40	c3nxkE_	Alignment	not modelled	8.1	7	PDB header: hydrolase Chain: E: PDB Molecule: cytoplasmic l-asparaginase; PDBTitle: crystal structure of probable cytoplasmic l-asparaginase from2 campylobacter jejuni
41	d2hkja1	Alignment	not modelled	7.6	22	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Topoisomerase VI-B subunit middle domain
42	d2ipqx1	Alignment	not modelled	7.5	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: STY4665 C-terminal domain-like
43	d1b78a_	Alignment	not modelled	7.3	18	Fold: Anticodon-binding domain-like Superfamily: ITPase-like Family: ITPase (Ham1)
44	c2wltA_	Alignment	not modelled	7.1	15	PDB header: hydrolase Chain: A: PDB Molecule: l-asparaginase; PDBTitle: the crystal structure of helicobacter pylori l-asparaginase2 at 1.4 a resolution
45	c3qngD_	Alignment	not modelled	7.1	13	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 the2 n,n'-diacetylchitobiose-specific phosphotransferase system
46	c2jbhA_	Alignment	not modelled	7.0	25	PDB header: transferase Chain: A: PDB Molecule: phosphoribosyltransferase domain-containing protein 1; PDBTitle: human phosphoribosyl transferase domain containing 1
47	d1xjsa_	Alignment	not modelled	6.9	14	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
48	d1zqla2	Alignment	not modelled	6.9	19	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
49	d1wmib1	Alignment	not modelled	6.9	25	Fold: Non-globular all-alpha subunits of globular proteins Superfamily: RelB-like Family: RelB-like
50	c2inpD_	Alignment	not modelled	6.9	33	PDB header: oxidoreductase Chain: D: PDB Molecule: phenol hydroxylase component phl; PDBTitle: structure of the phenol hydroxylase-regulatory protein2 complex
51	d2csba1	Alignment	not modelled	6.8	29	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Topoisomerase V repeat domain
52	d1ee8a1	Alignment	not modelled	6.8	31	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
53	d1nnsa_	Alignment	not modelled	6.7	13	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
54	d1cjba_	Alignment	not modelled	6.7	32	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
						PDB header: dna binding protein/dna Chain: A: PDB Molecule: chromosomal replication initiator protein

55	c3pvpA	Alignment	not modelled	6.7	8	dnaa; PDBTitle: structure of mycobacterium tuberculosis dnaa-dbd in complex with box22 dna
56	c3d8lB	Alignment	not modelled	6.6	53	PDB header: viral protein Chain: B: PDB Molecule: orf12; PDBTitle: crystal structure of orf12 from the lactococcus lactis bacteriophage2 p2
57	d1wfza	Alignment	not modelled	6.5	27	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
58	d4pgaa	Alignment	not modelled	6.4	29	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
59	d1j1va	Alignment	not modelled	6.4	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Chromosomal replication initiation factor DnaA C-terminal domain IV
60	d3bzka3	Alignment	not modelled	6.4	27	Fold: Tex N-terminal region-like Superfamily: Tex N-terminal region-like Family: Tex N-terminal region-like
61	c2kjaA	Alignment	not modelled	6.4	45	PDB header: signaling protein Chain: A: PDB Molecule: protein phosphatase 1 regulatory subunit 12a; PDBTitle: mypt1(658-714)
62	d1pyya2	Alignment	not modelled	6.3	41	Fold: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Superfamily: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Family: Penicillin-binding protein 2x (pbp-2x), c-terminal domain
63	d1l8qa1	Alignment	not modelled	6.2	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Chromosomal replication initiation factor DnaA C-terminal domain IV
64	d1hgxa	Alignment	not modelled	6.2	19	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
65	d1tdza1	Alignment	not modelled	6.2	25	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
66	c3orgB	Alignment	not modelled	6.1	17	PDB header: transport protein Chain: B: PDB Molecule: cmclc; PDBTitle: crystal structure of a eukaryotic clc transporter
67	c2cfmA	Alignment	not modelled	6.1	24	PDB header: ligase Chain: A: PDB Molecule: thermostable dna ligase; PDBTitle: atp-dependent dna ligase from pyrococcus furiosus
68	d1v7ra	Alignment	not modelled	6.0	21	Fold: Anticodon-binding domain-like Superfamily: ITPase-like Family: ITPase (Ham1)
69	c3o7mD	Alignment	not modelled	6.0	27	PDB header: transferase Chain: D: PDB Molecule: hypoxanthine phosphoribosyltransferase; PDBTitle: 1.98 angstrom resolution crystal structure of a hypoxanthine-guanine2 phosphoribosyltransferase (hpt-2) from bacillus anthracis str. 'ames3 ancestor'
70	c2ovqA	Alignment	not modelled	5.9	33	PDB header: transcription/cell cycle Chain: A: PDB Molecule: s-phase kinase-associated protein 1a; PDBTitle: structure of the skp1-fbw7-cyclinedegc complex
71	d1xeqa1	Alignment	not modelled	5.8	50	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: N-terminal, RNA-binding domain of nonstructural protein NS1
72	d1rp5a2	Alignment	not modelled	5.8	35	Fold: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Superfamily: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Family: Penicillin-binding protein 2x (pbp-2x), c-terminal domain
73	c3dh4A	Alignment	not modelled	5.8	9	PDB header: transport protein Chain: A: PDB Molecule: sodium/glucose cotransporter; PDBTitle: crystal structure of sodium/sugar symporter with bound galactose from2 vibrio parahaemolyticus
74	c3bezC	Alignment	not modelled	5.8	11	PDB header: hydrolase Chain: C: PDB Molecule: protease 4; PDBTitle: crystal structure of escherichia coli signal peptide peptidase (sppa),2 semet crystals
75	c3p2lD	Alignment	not modelled	5.8	11	PDB header: hydrolase Chain: D: PDB Molecule: atp-dependent clp protease proteolytic subunit; PDBTitle: crystal structure of atp-dependent clp protease subunit p from2 francisella tularensis
76	d1rsob	Alignment	not modelled	5.7	35	Fold: L27 domain Superfamily: L27 domain Family: L27 domain
77	d2d6fa2	Alignment	not modelled	5.7	6	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
78	c1wnfA	Alignment	not modelled	5.6	25	PDB header: hydrolase Chain: A: PDB Molecule: l-asparaginase; PDBTitle: crystal structure of ph0066 from pyrococcus horikoshii
79	c1by0A	Alignment	not modelled	5.6	40	PDB header: rna binding protein Chain: A: PDB Molecule: protein (hepatitis delta antigen); PDBTitle: n-terminal leucine-repeat region of hepatitis delta antigen
80	c3lk2T	Alignment	not modelled	5.6	37	PDB header: protein binding Chain: T: PDB Molecule: leucine-rich repeat-containing protein 16a; PDBTitle: crystal structure of capz bound to the uncapping motif from carmil

81	c2zhA	Alignment	not modelled	5.6	8	PDB header: transcription Chain: A: PDB Molecule: redox-sensitive transcriptional activator soxr; PDBTitle: crystal structure of soxr
82	d1nh2d1	Alignment	not modelled	5.5	19	Fold: Transcription factor IIA (TFIIA), alpha-helical domain Superfamily: Transcription factor IIA (TFIIA), alpha-helical domain Family: Transcription factor IIA (TFIIA), alpha-helical domain
83	d2ak3a1	Alignment	not modelled	5.4	10	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nucleotide and nucleoside kinases
84	c3r66A	Alignment	not modelled	5.4	50	PDB header: viral protein/antiviral protein Chain: A: PDB Molecule: non-structural protein 1; PDBTitle: crystal structure of human isg15 in complex with ns1 n-terminal region2 from influenza virus b, northeast structural genomics consortium3 target ids hx6481, hr2873, and or2
85	d2ocda1	Alignment	not modelled	5.4	20	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
86	d1u14a	Alignment	not modelled	5.3	10	Fold: Anticodon-binding domain-like Superfamily: ITPase-like Family: YjxX-like
87	c2yxhB	Alignment	not modelled	5.3	44	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: mazg-related protein; PDBTitle: crystal structure of mazg-related protein from thermotoga maritima
88	c2z7eB	Alignment	not modelled	5.3	13	PDB header: biosynthetic protein Chain: B: PDB Molecule: nifu-like protein; PDBTitle: crystal structure of aquifex aeolicus iscu with bound [2fe-2 2s] cluster
89	d1su0b	Alignment	not modelled	5.3	23	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
90	c1y7oE	Alignment	not modelled	5.3	23	PDB header: hydrolase Chain: E: PDB Molecule: atp-dependent clp protease proteolytic subunit; PDBTitle: the structure of streptococcus pneumoniae a153p clpp
91	d1q08a	Alignment	not modelled	5.2	33	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
92	c2jmlA	Alignment	not modelled	5.2	21	PDB header: transcription Chain: A: PDB Molecule: dna binding domain/transcriptional regulator; PDBTitle: solution structure of the n-terminal domain of cara repressor
93	d1k25a2	Alignment	not modelled	5.2	24	Fold: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Superfamily: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Family: Penicillin-binding protein 2x (pbp-2x), c-terminal domain
94	d1j7ja	Alignment	not modelled	5.1	23	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
95	d1csei	Alignment	not modelled	5.1	24	Fold: Cl-2 family of serine protease inhibitors Superfamily: Cl-2 family of serine protease inhibitors Family: Cl-2 family of serine protease inhibitors
96	c2bbjB	Alignment	not modelled	5.1	14	PDB header: metal transport/membrane protein Chain: B: PDB Molecule: divalent cation transport-related protein; PDBTitle: crystal structure of the cora mg2+ transporter
97	c1lnlB	Alignment	not modelled	5.1	14	PDB header: oxygen storage/transport Chain: B: PDB Molecule: hemocyanin; PDBTitle: structure of deoxygenated hemocyanin from rapana thomasiana
98	c3oc5A	Alignment	not modelled	5.1	32	PDB header: cell adhesion Chain: A: PDB Molecule: toxin coregulated pilus biosynthesis protein f; PDBTitle: crystal structure of the vibrio cholerae secreted colonization factor2 tcpf
99	d1jo5a	Alignment	not modelled	5.0	20	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits