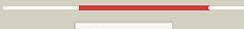
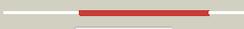
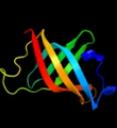
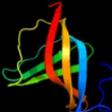
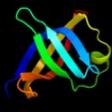
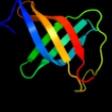


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P0ADU5
Date	Thu Jan 5 11:21:52 GMT 2012
Unique Job ID	3d8a265d58a59ce0

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1nxa_	 Alignment		100.0	97	Fold: OB-fold Superfamily: Hypothetical protein YgiW Family: Hypothetical protein YgiW
2	d1l0wa1	 Alignment		97.4	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
3	d1b8aa1	 Alignment		97.4	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
4	c1wydB_	 Alignment		97.3	17	PDB header: ligase Chain: B: PDB Molecule: hypothetical aspartyl-trna synthetase; PDBTitle: crystal structure of aspartyl-trna synthetase from <i>sulfolobus tokodaii</i>
5	c1b8aB_	 Alignment		97.2	18	PDB header: ligase Chain: B: PDB Molecule: protein (aspartyl-trna synthetase); PDBTitle: aspartyl-trna synthetase
6	d1c0aa1	 Alignment		97.1	19	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
7	d1n9wa1	 Alignment		97.0	20	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
8	c3bjuB_	 Alignment		96.8	15	PDB header: ligase Chain: B: PDB Molecule: lysyl-trna synthetase; PDBTitle: crystal structure of tetrameric form of human lysyl-trna2 synthetase
9	c1eqrC_	 Alignment		96.8	17	PDB header: ligase Chain: C: PDB Molecule: aspartyl-trna synthetase; PDBTitle: crystal structure of free aspartyl-trna synthetase from <i>escherichia coli</i>
10	c3e9hB_	 Alignment		96.8	16	PDB header: ligase Chain: B: PDB Molecule: lysyl-trna synthetase; PDBTitle: lysyl-trna synthetase from <i>bacillus stearothermophilus</i> 2 complexed with l-lysylsulfamoyl adenosine
11	c3m4qA_	 Alignment		96.7	19	PDB header: ligase Chain: A: PDB Molecule: asparaginyl-trna synthetase, putative; PDBTitle: entamoeba histolytica asparaginyl-trna synthetase (asnrs)

12	d1e1oa1	Alignment		96.6	16	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
13	c3i7fA_	Alignment		96.6	23	PDB header: ligase Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: aspartyl trna synthetase from entamoeba histolytica
14	d1bbua1	Alignment		96.5	15	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
15	c3kf6A_	Alignment		96.5	19	PDB header: structural protein Chain: A: PDB Molecule: protein stn1; PDBTitle: crystal structure of s. pombe stn1-ten1 complex
16	c1n9wA_	Alignment		96.4	19	PDB header: biosynthetic protein Chain: A: PDB Molecule: aspartyl-trna synthetase 2; PDBTitle: crystal structure of the non-discriminating and archaeal-2 type aspartyl-trna synthetase from thermus thermophilus
17	d1eova1	Alignment		96.2	15	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
18	c1x55A_	Alignment		96.2	16	PDB header: ligase Chain: A: PDB Molecule: asparaginyl-trna synthetase; PDBTitle: crystal structure of asparaginyl-trna synthetase from pyrococcus2 horikoshii complexed with asparaginyl-adenylate analogue
19	c1e22A_	Alignment		96.0	18	PDB header: ligase Chain: A: PDB Molecule: lysyl-trna synthetase; PDBTitle: lysyl-trna synthetase (lysu) hexagonal form complexed with2 lysine and the non-hydrolysable atp analogue amp-pcp
20	d2pi2a1	Alignment		96.0	21	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
21	c1efwA_	Alignment	not modelled	95.7	17	PDB header: ligase/rna Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: crystal structure of aspartyl-trna synthetase from thermus2 thermophilus complexed to trnaasp from escherichia coli
22	c2pi2A_	Alignment	not modelled	95.6	21	PDB header: replication, dna binding protein Chain: A: PDB Molecule: replication protein a 32 kda subunit; PDBTitle: full-length replication protein a subunits rpa14 and rpa32
23	c2xgtB_	Alignment	not modelled	95.2	21	PDB header: ligase Chain: B: PDB Molecule: asparaginyl-trna synthetase, cytoplasmic; PDBTitle: asparaginyl-trna synthetase from brugia malayi complexed2 with the sulphamoyl analogue of asparaginyl-adenylate
24	c3mxnB_	Alignment	not modelled	95.0	17	PDB header: replication Chain: B: PDB Molecule: recq-mediated genome instability protein 2; PDBTitle: crystal structure of the rmi core complex
25	c3e0eA_	Alignment	not modelled	94.9	23	PDB header: replication Chain: A: PDB Molecule: replication protein a; PDBTitle: crystal structure of a domain of replication protein a from2 methanococcus maripaludis. northeast structural genomics3 target mrr110b
26	c1asyA_	Alignment	not modelled	94.6	17	PDB header: complex (aminoacyl-trna synthase/trna) Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: class ii aminoacyl transfer rna synthetases: crystal2 structure of yeast aspartyl-trna synthetase complexed with3 trna asp
27	d1krta_	Alignment	not modelled	93.0	15	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain PDB header: replication

28	c3dm3A	Alignment	not modelled	92.5	18	Chain: A: PDB Molecule: replication factor a; PDBTitle: crystal structure of a domain of a replication factor a2 protein, from methanocaldococcus jannaschii. northeast3 structural genomics target mjrl118e
29	d1gm5a2	Alignment	not modelled	91.8	14	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: RecG "wedge" domain
30	d2oq0a1	Alignment	not modelled	91.1	16	Fold: OB-fold Superfamily: HIN-2000 domain-like Family: HIN-200/IF120x domain
31	c3kf8C	Alignment	not modelled	90.2	29	PDB header: structural protein Chain: C: PDB Molecule: protein stn1; PDBTitle: crystal structure of c. tropicalis stn1-ten1 complex
32	c2oq0D	Alignment	not modelled	86.0	16	PDB header: protein binding Chain: D: PDB Molecule: gamma-interferon-inducible protein ifi-16; PDBTitle: crystal structure of the first hin-200 domain of interferon-inducible2 protein 16
33	c3b6yB	Alignment	not modelled	85.4	19	PDB header: protein binding Chain: B: PDB Molecule: gamma-interferon-inducible protein ifi-16; PDBTitle: crystal structure of the second hin-200 domain of interferon-inducible2 protein 16
34	c2k50A	Alignment	not modelled	81.2	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: replication factor a related protein; PDBTitle: solution nmr structure of the replication factor a related2 protein from methanobacterium thermoautotrophium.3 northeast structural genomics target tr91a.
35	c3e0iG	Alignment	not modelled	79.5	18	PDB header: transferase Chain: G: PDB Molecule: dna polymerase subunit delta-2; PDBTitle: x-ray structure of the complex of regulatory subunits of2 human dna polymerase delta
36	c2k75A	Alignment	not modelled	74.2	16	PDB header: dna binding protein Chain: A: PDB Molecule: uncharacterized protein ta0387; PDBTitle: solution nmr structure of the ob domain of ta0387 from2 thermoplasma acidophilum. northeast structural genomics3 consortium target tar80b.
37	c1gm5A	Alignment	not modelled	71.5	14	PDB header: helicase Chain: A: PDB Molecule: recg; PDBTitle: structure of recg bound to three-way dna junction
38	d2pi2e1	Alignment	not modelled	54.5	14	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
39	c3hbcA	Alignment	not modelled	51.4	15	PDB header: hydrolase Chain: A: PDB Molecule: choloylglycine hydrolase; PDBTitle: crystal structure of choloylglycine hydrolase from bacteroides2 thetaiotaomicron vpi
40	c2pqaB	Alignment	not modelled	49.9	14	PDB header: replication Chain: B: PDB Molecule: replication protein a 14 kda subunit; PDBTitle: crystal structure of full-length human rpa 14/32 heterodimer
41	c2kenA	Alignment	not modelled	46.1	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein; PDBTitle: solution nmr structure of the ob domain (residues 67-166)2 of mm0293 from methanosarcina mazei. northeast structural3 genomics consortium target mar214a.
42	d1t9ha1	Alignment	not modelled	44.7	23	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
43	c2hezB	Alignment	not modelled	38.9	17	PDB header: hydrolase Chain: B: PDB Molecule: bile salt hydrolase; PDBTitle: bifidobacterium longum bile salt hydrolase
44	c3cp0A	Alignment	not modelled	37.7	21	PDB header: membrane protein Chain: A: PDB Molecule: membrane protein implicated in regulation of membrane PDBTitle: crystal structure of the soluble domain of membrane protein implicated2 in regulation of membrane protease activity from corynebacterium3 glutamicum
45	d1cz5a1	Alignment	not modelled	37.0	23	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
46	c2k14A	Alignment	not modelled	36.9	20	PDB header: unknown function Chain: A: PDB Molecule: yuaF protein; PDBTitle: solution structure of the soluble domain of the nfd2 protein yuaF from bacillus subtilis
47	d1jt8a	Alignment	not modelled	36.6	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
48	c3h43F	Alignment	not modelled	32.2	21	PDB header: hydrolase Chain: F: PDB Molecule: proteasome-activating nucleotidase; PDBTitle: n-terminal domain of the proteasome-activating nucleotidase2 of methanocaldococcus jannaschii
49	c3ka5A	Alignment	not modelled	31.1	28	PDB header: chaperone Chain: A: PDB Molecule: ribosome-associated protein y (psrp-1); PDBTitle: crystal structure of ribosome-associated protein y (psrp-1)2 from clostridium acetobutylicum. northeast structural3 genomics consortium target id car123a
50	c2wg6L	Alignment	not modelled	27.7	19	PDB header: transcription,hydrolase Chain: L: PDB Molecule: general control protein gcn4, PDBTitle: proteasome-activating nucleotidase (pan) n-domain (57-134)2 from archaeoglobus fulgidus fused to gcn4, p61a mutant
51	c3obyB	Alignment	not modelled	27.2	18	PDB header: hydrolase Chain: B: PDB Molecule: protein pelota homolog; PDBTitle: crystal structure of archaeoglobus fulgidus pelota reveals inter-2 domain structural plasticity
52	d2pva	Alignment	not modelled	25.1	44	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn

52	d2pvdg	Alignment	not modelled	23.1	44	hydrolases) Family: Penicillin V acylase
53	d2do3a1	Alignment	not modelled	25.0	21	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: SPT5 KOW domain-like
54	d2cs7a1	Alignment	not modelled	24.6	16	Fold: IL8-like Superfamily: PhtA domain-like Family: PhtA domain-like
55	d2exda1	Alignment	not modelled	24.1	18	Fold: OB-fold Superfamily: NfeD domain-like Family: NfeD domain-like
56	c2oqkA	Alignment	not modelled	24.0	19	PDB header: translation Chain: A; PDB Molecule: putative translation initiation factor eif-1a; PDBTitle: crystal structure of putative cryptosporidium parvum translation2 initiation factor eif-1a
57	c2bx6A	Alignment	not modelled	23.8	10	PDB header: transduction protein Chain: A; PDB Molecule: xrp2 protein; PDBTitle: crystal structure of the human retinitis pigmentosa2 protein 2 (rp2)
58	d1qcsa1	Alignment	not modelled	23.4	17	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
59	c2bjgB	Alignment	not modelled	23.3	22	PDB header: hydrolase Chain: B; PDB Molecule: choloylglycine hydrolase; PDBTitle: crystal structure of conjugated bile acid hydrolase from2 clostridium perfringens in complex with reaction products3 taurine and deoxycholate
60	d1qkia2	Alignment	not modelled	22.9	27	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Glucose 6-phosphate dehydrogenase-like
61	c2jqoA	Alignment	not modelled	22.0	15	PDB header: structural genomics Chain: A; PDB Molecule: hypothetical protein yoba; PDBTitle: nmr solution structure of bacillus subtilis yoba 21-120:2 northeast structural genomics consortium target sr547
62	c3k2tA	Alignment	not modelled	21.4	20	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: lmo2511 protein; PDBTitle: crystal structure of lmo2511 protein from listeria2 monocytogenes, northeast structural genomics consortium3 target lkr84a
63	c1cz5A	Alignment	not modelled	21.3	23	PDB header: hydrolase Chain: A; PDB Molecule: vcp-like atpase; PDBTitle: nmr structure of vat-n: the n-terminal domain of vat (vcp-2 like atpase of thermoplasma)
64	d1h9aa2	Alignment	not modelled	21.2	33	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Glucose 6-phosphate dehydrogenase-like
65	c1lttE	Alignment	not modelled	20.0	23	PDB header: replication Chain: E; PDB Molecule: dna replication initiator (cdc21/cdc54); PDBTitle: the dodecamer structure of mcm from archaean m.2 thermoautotrophicum
66	d1vr3a1	Alignment	not modelled	19.9	13	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Acireductone dioxygenase
67	c3f6hA	Alignment	not modelled	19.4	12	PDB header: transferase Chain: A; PDB Molecule: alpha-isopropylmalate synthase; PDBTitle: crystal structure of the regulatory domain of licms in2 complexed with isoleucine - type iii
68	d2vgna1	Alignment	not modelled	19.0	17	Fold: Sm-like fold Superfamily: Dom34/Pelota N-terminal domain-like Family: Dom34/Pelota N-terminal domain-like
69	d1g4ma2	Alignment	not modelled	18.8	12	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Arrestin/Vps26-like
70	c3e0dA	Alignment	not modelled	18.7	19	PDB header: transferase/dna Chain: A; PDB Molecule: dna polymerase iii subunit alpha; PDBTitle: insights into the replisome from the crystal structure of2 the ternary complex of the eubacterial dna polymerase iii3 alpha-subunit
71	d1sr3a	Alignment	not modelled	18.3	19	Fold: OB-fold Superfamily: Heme chaperone CcmE Family: Heme chaperone CcmE
72	c3lqjA	Alignment	not modelled	18.3	23	PDB header: dna binding protein Chain: A; PDB Molecule: single-stranded dna-binding protein; PDBTitle: crystal structure of single-stranded binding protein (ssb) from2 bartonella henselae
73	c1h9aA	Alignment	not modelled	18.3	33	PDB header: oxidoreductase (choh(d) - nad(p)) Chain: A; PDB Molecule: glucose 6-phosphate 1-dehydrogenase; PDBTitle: complex of active mutant (q365->c) of glucose 6-phosphate2 dehydrogenase from l. mesenteroides with coenzyme nadp
74	c2k5hA	Alignment	not modelled	18.1	17	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: conserved protein; PDBTitle: solution nmr structure of protein encoded by mth693 from2 methanobacterium thermoautotrophicum: northeast structural3 genomics consortium target tt824a
75	d1ltta	Alignment	not modelled	18.0	23	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: DNA replication initiator (cdc21/cdc54) N-terminal domain
76	d1v1qa	Alignment	not modelled	17.8	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
77	c2vnmA	Alignment	not modelled	17.5	13	PDB header: cell cycle Chain: A; PDB Molecule: dom34;

77	c2vgnA_	Alignment	not modelled	17.3	13	PDBTitle: structure of yeast dom34 : a protein related to translation2 termination factor erf1 and involved in no-go decay. PDB header: oxidoreductase (choh(d)-nadp) Chain: B: PDB Molecule: glucose-6-phosphate 1-dehydrogenase;
78	c2bhlB_	Alignment	not modelled	17.5	27	PDBTitle: x-ray structure of human glucose-6-phosphate dehydrogenase2 (deletion variant) complexed with glucose-6-phosphate
79	d2cu3a1	Alignment	not modelled	17.4	15	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
80	d1u0la1	Alignment	not modelled	17.1	24	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
81	d1o7ia_	Alignment	not modelled	17.1	12	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
82	c2kl0A_	Alignment	not modelled	16.5	30	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative thiamin biosynthesis this; PDBTitle: solution nmr structure of rhodopseudomonas palustris rpa3574,2 northeast structural genomics consortium (nesg) target rpr325
83	d1clf1a2	Alignment	not modelled	16.2	16	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Arrestin/Vps26-like
84	c3cl5A_	Alignment	not modelled	16.0	38	PDB header: hydrolase Chain: A: PDB Molecule: hemagglutinin-esterase; PDBTitle: structure of coronavirus hemagglutinin-esterase in complex with 4,9-o-2 diacetyl sialic acid
85	c1qkiE_	Alignment	not modelled	15.9	27	PDB header: oxidoreductase Chain: E: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray structure of human glucose 6-phosphate dehydrogenase2 (variant canton r459l) complexed with structural nadp+
86	d1j6qa_	Alignment	not modelled	15.9	21	Fold: OB-fold Superfamily: Heme chaperone CcmE Family: Heme chaperone CcmE
87	c1j6qA_	Alignment	not modelled	15.9	21	PDB header: chaperone Chain: A: PDB Molecule: cytochrome c maturation protein e; PDBTitle: solution structure and characterization of the heme2 chaperone ccme
88	c1tygG_	Alignment	not modelled	15.9	32	PDB header: biosynthetic protein Chain: G: PDB Molecule: yjbs; PDBTitle: structure of the thiazole synthase/this complex
89	d1tygb_	Alignment	not modelled	15.5	30	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
90	c2oqcB_	Alignment	not modelled	15.1	12	PDB header: hydrolase Chain: B: PDB Molecule: penicillin v acylase; PDBTitle: crystal structure of penicillin v acylase from bacillus subtilis
91	d1hr0w_	Alignment	not modelled	14.7	20	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
92	d1y9qa2	Alignment	not modelled	14.7	17	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Probable transcriptional regulator VC1968, C-terminal domain
93	c2pjhB_	Alignment	not modelled	14.2	18	PDB header: transport protein Chain: B: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: strctural model of the p97 n domain- npl4 ubd complex
94	c3cwiA_	Alignment	not modelled	14.1	25	PDB header: biosynthetic protein Chain: A: PDB Molecule: thiamine-biosynthesis protein this; PDBTitle: crystal structure of thiamine biosynthesis protein (this)2 from geobacter metallireducens. northeast structural3 genomics consortium target gmr137
95	c3i4oA_	Alignment	not modelled	13.9	19	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-1; PDBTitle: crystal structure of translation initiation factor 1 from2 mycobacterium tuberculosis
96	c2gu9B_	Alignment	not modelled	13.8	10	PDB header: immune system Chain: B: PDB Molecule: tetracenomycin polyketide synthesis protein; PDBTitle: crystal structure of xc5357 from xanthomonas campestris: a2 putative tetracenomycin polyketide synthesis protein3 adopting a novel cupin subfamily structure
97	c2yk5A_	Alignment	not modelled	13.6	15	PDB header: transferase Chain: A: PDB Molecule: cmp-n-acetylneuraminate-beta-galactosamide-alpha-2,3- PDBTitle: structure of neisseria los-specific sialyltransferase (nst),2 in complex with cmp.
98	d1t44g_	Alignment	not modelled	13.4	24	Fold: Gelsolin-like Superfamily: Actin depolymerizing proteins Family: Gelsolin-like
99	d1ah9a_	Alignment	not modelled	13.2	16	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like