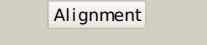
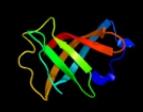
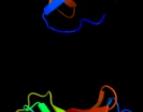


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P31130
Date	Thu Jan 5 11:47:14 GMT 2012
Unique Job ID	6da7779d50a3a894

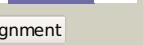
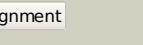
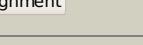
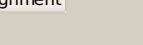
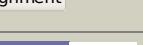
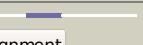
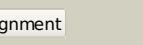
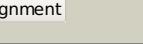
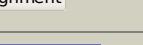
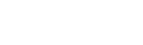
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1nnxa_			100.0	35	Fold: OB-fold Superfamily: Hypothetical protein YgiW Family: Hypothetical protein YgiW
2	d1b8aa1			96.1	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
3	d1l0wa1			96.1	22	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
4	c1b8aB_			96.1	14	PDB header: ligase Chain: B: PDB Molecule: protein (aspartyl-tRNA synthetase); PDBTitle: aspartyl-tRNA synthetase
5	c1wydB_			96.1	19	PDB header: ligase Chain: B: PDB Molecule: hypothetical aspartyl-tRNA synthetase; PDBTitle: crystal structure of aspartyl-tRNA synthetase from sulfolobus tokodaii
6	d2pi2a1			96.0	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
7	d1n9wa1			95.8	25	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
8	c2pi2A_			95.4	16	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
9	c3mxnb_			95.3	19	PDB header: replication Chain: B: PDB Molecule: recQL-mediated genome instability protein 2; PDBTitle: crystal structure of the RMI core complex
10	d1c0aa1			95.2	20	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
11	c3kf6A_			95.0	13	PDB header: structural protein Chain: A: PDB Molecule: protein stn1; PDBTitle: crystal structure of S. pombe stn1-ten1 complex

12	c3i7fA_	Alignment		94.7	15	PDB header: ligase Chain: A: PDB Molecule: aspartyl-trna synthetase; PDBTitle: aspartyl trna synthetase from entamoeba histolytica
13	c1egrC_	Alignment		94.6	22	PDB header: ligase Chain: C: PDB Molecule: aspartyl-trna synthetase; PDBTitle: crystal structure of free aspartyl-trna synthetase from2 escherichia coli
14	c3bjuB_	Alignment		93.6	15	PDB header: ligase Chain: B: PDB Molecule: lysyl-trna synthetase; PDBTitle: crystal structure of tetrameric form of human lysyl-trna2 synthetase
15	c3m4qA_	Alignment		93.5	22	PDB header: ligase Chain: A: PDB Molecule: asparaginyl-trna synthetase, putative; PDBTitle: entamoeba histolytica asparaginyl-trna synthetase (asnrs)
16	c1x55A_	Alignment		93.4	21	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
17	c3e9hb_	Alignment		93.4	16	PDB header: ligase Chain: B: PDB Molecule: lysyl-trna synthetase; PDBTitle: lysyl-trna synthetase from bacillus stearothermophilus2 complexed with l-lysylsulfamoyl adenosine
18	d1eoval	Alignment		93.0	14	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
19	c1efwA_	Alignment		91.3	19	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
20	c3e0eA_	Alignment		91.0	14	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
21	d1bbu1	Alignment	not modelled	90.9	16	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
22	d1elo1	Alignment	not modelled	90.9	19	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
23	c1n9wA_	Alignment	not modelled	90.5	26	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
24	d2oq0a1	Alignment	not modelled	90.3	16	Fold: OB-fold Superfamily: HIN-2000 domain-like Family: HIN-200/F120x domain
25	c2xgtB_	Alignment	not modelled	89.1	17	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
26	c1e22A_	Alignment	not modelled	86.4	20	PDB header: ligase Chain: A: PDB Molecule: lysyl-trna synthetase; PDBTitle: lysyl-trna synthetase (lys1) hexagonal form complexed with2 lysine and the non-hydrolysable atp analogue amp-pcp
27	c3dm3A_	Alignment	not modelled	86.3	19	PDB header: replication 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 mjr118e
28	d1gm5a2	Alignment	not modelled	85.1	8	Fold: OB-fold Superfamily: Nucleic acid-binding proteins

					Family: RecG "wedge" domain
29	c3b6yB_	Alignment	not modelled	83.3	16 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
30	c3kf8C_	Alignment	not modelled	83.2	16 PDB header: structural protein Chain: C: PDB Molecule: protein stn1; PDBTitle: crystal structure of c. tropicalis stn1-ten1 complex
31	d1krta_	Alignment	not modelled	80.9	16 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Anticodon-binding domain
32	d1sr3a_	Alignment	not modelled	77.0	13 Fold: OB-fold Superfamily: Heme chaperone CcmE Family: Heme chaperone CcmE
33	c1asyA_	Alignment	not modelled	72.0	14 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
34	c3e0jG_	Alignment	not modelled	70.5	16 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
35	c2k75A_	Alignment	not modelled	68.6	14 PDB header: da 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.
36	c3hbcA_	Alignment	not modelled	63.3	15 PDB header: hydrolase Chain: A: PDB Molecule: choloylglycine hydrolase; PDBTitle: crystal structure of choloylglycine hydrolase from bacteroides2 thetaiotaomicron vpi
37	c2oq0D_	Alignment	not modelled	62.7	15 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
38	d1t9ha1	Alignment	not modelled	49.6	11 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
39	c1gm5A_	Alignment	not modelled	46.1	8 PDB header: helicase Chain: A: PDB Molecule: recg; PDBTitle: structure of recg bound to three-way dna junction
40	d1j6qa_	Alignment	not modelled	44.4	21 Fold: OB-fold Superfamily: Heme chaperone CcmE Family: Heme chaperone CcmE
41	c1j6qA_	Alignment	not modelled	44.4	21 PDB header: chaperone Chain: A: PDB Molecule: cytochrome c maturation protein e; PDBTitle: solution structure and characterization of the heme2 chaperone ccme
42	c2hezB_	Alignment	not modelled	38.2	24 PDB header: hydrolase Chain: B: PDB Molecule: bile salt hydrolase; PDBTitle: bifidobacterium longum bile salt hydrolase
43	d1cz5a1	Alignment	not modelled	36.2	10 Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
44	c2kenA_	Alignment	not modelled	35.7	11 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 methanoscincus mazaei. northeast structural3 genomics consortium target mar214a.
45	c3cp0A_	Alignment	not modelled	35.5	8 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
46	d2pi2e1	Alignment	not modelled	34.3	15 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
47	d1jt8a_	Alignment	not modelled	31.8	15 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
48	c3obyB_	Alignment	not modelled	31.5	16 PDB header: hydrolase Chain: B: PDB Molecule: protein pelota homolog; PDBTitle: crystal structure of archaeoglobus fulgidus pelota reveals inter-2 domain structural plasticity
49	c3ka5A_	Alignment	not modelled	31.2	32 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	d2vgna1	Alignment	not modelled	27.0	13 Fold: Sm-like fold Superfamily: Dom34/Pelota N-terminal domain-like Family: Dom34/Pelota N-terminal domain-like
51	d2cs7a1	Alignment	not modelled	26.9	13 Fold: IL8-like Superfamily: PhtA domain-like Family: PhtA domain-like
52	c2bx6A_	Alignment	not modelled	26.6	21 PDB header: transduction protein Chain: A: PDB Molecule: xrp2 protein; PDBTitle: crystal structure of the human retinitis pigmentosa2 protein 2 (rp2)
					PDB header: structural genomics, unknown function

53	c2k5hA	Alignment	not modelled	26.5	13	Chain: A: PDB Molecule: conserved protein; PDBTitle: solution nmr structure of protein encoded by mth693 from2 methanobacterium thermoautotrophicum: northeast structural3 genomics consortium target tt824a
54	d2pvaa	Alignment	not modelled	25.5	35	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile amino hydrolases (Ntn hydrolases) Family: Penicillin V acylase
55	c3k2tA	Alignment	not modelled	23.9	24	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
56	d1qcsa1	Alignment	not modelled	23.9	10	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
57	d2heqa1	Alignment	not modelled	23.8	30	Fold: SH3-like barrel Superfamily: YorP-like Family: YorP-like
58	c2pqab	Alignment	not modelled	23.8	11	PDB header: replication Chain: B: PDB Molecule: replication protein a 14 kda subunit; PDBTitle: crystal structure of full-length human rpa 14/32 heterodimer
59	d1u0la1	Alignment	not modelled	22.9	16	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
60	c2bjgB	Alignment	not modelled	22.7	24	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
61	c2oqkA	Alignment	not modelled	22.5	17	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
62	d2exda1	Alignment	not modelled	22.3	10	Fold: OB-fold Superfamily: NfeD domain-like Family: NfeD domain-like
63	c3h43F	Alignment	not modelled	21.8	19	PDB header: hydrolase Chain: F: PDB Molecule: proteasome-activating nucleotidase; PDBTitle: n-terminal domain of the proteasome-activating nucleotidase2 of methanococcoides jannaschii
64	c2vgmA	Alignment	not modelled	21.7	9	PDB header: cell cycle Chain: A: PDB Molecule: dom34; PDBTitle: structure of yeast dom34 : a protein related to translation2 termination factor erf1 and involved in no-go decay.
65	c1cz5A	Alignment	not modelled	21.3	10	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)
66	d2do3a1	Alignment	not modelled	20.7	18	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: SPT5 KOW domain-like
67	d2cu3a1	Alignment	not modelled	20.5	5	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
68	c2k50A	Alignment	not modelled	19.3	16	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 thermoautotrophicum.3 northeast structural genomics target tr91a.
69	c2kl0A	Alignment	not modelled	19.1	25	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
70	d1tygb	Alignment	not modelled	18.7	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
71	c3cl5A	Alignment	not modelled	18.6	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
72	d1hr0w	Alignment	not modelled	18.3	13	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
73	d1vr3a1	Alignment	not modelled	18.2	16	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Acireductone dioxygenase
74	c1tygG	Alignment	not modelled	17.8	21	PDB header: biosynthetic protein Chain: G: PDB Molecule: yjbs; PDBTitle: structure of the thiazole synthase/this complex
75	c2wg6L	Alignment	not modelled	17.7	17	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
76	d1qkia2	Alignment	not modelled	16.6	13	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Glucose 6-phosphate dehydrogenase-like
77	c3e0dA	Alignment	not modelled	15.9	25	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

78	c2oqcB		Alignment	not modelled	15.5	18	PDB header: hydrolase Chain: B: PDB Molecule: penicillin v acylase; PDBTitle: crystal structure of penicillin v acylase from bacillus subtilis
79	c3cwiA		Alignment	not modelled	15.4	15	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
80	d1h9aa2		Alignment	not modelled	15.3	7	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Glucose 6-phosphate dehydrogenase-like
81	d1t44g		Alignment	not modelled	14.9	24	Fold: Gelsolin-like Superfamily: Actin depolymerizing proteins Family: Gelsolin-like
82	d1o7ia		Alignment	not modelled	14.7	12	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
83	d1zud21		Alignment	not modelled	13.7	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: This
84	c1h9aA		Alignment	not modelled	13.0	7	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
85	d1ytfc		Alignment	not modelled	12.9	16	Fold: Transcription factor IIA (TFIIA), beta-barrel domain Superfamily: Transcription factor IIA (TFIIA), beta-barrel domain Family: Transcription factor IIA (TFIIA), beta-barrel domain
86	d1v1qa		Alignment	not modelled	12.9	9	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
87	c3i4oA		Alignment	not modelled	12.6	8	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-1; PDBTitle: crystal structure of translation initiation factor 1 from2 mycobacterium tuberculosis
88	c2yk5A		Alignment	not modelled	12.5	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.
89	d1ah9a		Alignment	not modelled	12.2	6	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
90	c2bh1B		Alignment	not modelled	12.0	13	PDB header: oxidoreductase (choh(d)-nadp) Chain: B: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray structure of human glucose-6-phosphate dehydrogenase2 (deletion variant) complexed with glucose-6-phosphate
91	d1nvpc		Alignment	not modelled	11.9	21	Fold: Transcription factor IIA (TFIIA), beta-barrel domain Superfamily: Transcription factor IIA (TFIIA), beta-barrel domain Family: Transcription factor IIA (TFIIA), beta-barrel domain
92	c1nvpC		Alignment	not modelled	11.9	21	PDB header: transcription/dna Chain: C: PDB Molecule: transcription initiation factor iia beta chain; PDBTitle: human tfiia/tbp/dna complex
93	c3f6hA		Alignment	not modelled	11.7	16	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
94	d1umua		Alignment	not modelled	11.4	3	Fold: LexA/Signal peptidase Superfamily: LexA/Signal peptidase Family: LexA-related
95	d1nh2c		Alignment	not modelled	11.2	16	Fold: Transcription factor IIA (TFIIA), beta-barrel domain Superfamily: Transcription factor IIA (TFIIA), beta-barrel domain Family: Transcription factor IIA (TFIIA), beta-barrel domain
96	c1nh2C		Alignment	not modelled	11.2	16	PDB header: transcription/dna Chain: C: PDB Molecule: transcription initiation factor iia large chain; PDBTitle: crystal structure of a yeast tfiia/tbp/dna complex
97	c1qkiE		Alignment	not modelled	11.1	13	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+
98	d1g4ma2		Alignment	not modelled	11.0	11	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Arrestin/Vps26-like
99	c2pjhb		Alignment	not modelled	10.9	15	PDB header: transport protein Chain: B: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: strctural model of the p97 n domain- npl4 ubd complex