

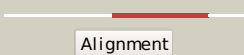

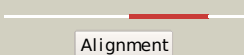



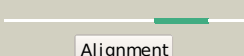
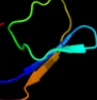
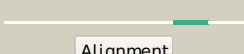

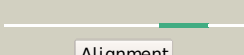

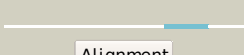


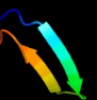







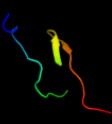
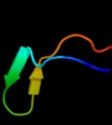

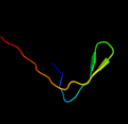
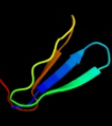



Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0AAS3
Date	Thu Jan 5 11:13:40 GMT 2012
Unique Job ID	4573f68575a02432

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2k5hA_	 Alignment		99.6	22	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
2	d2exda1	 Alignment		99.5	17	Fold: OB-fold Superfamily: NfeD domain-like Family: NfeD domain-like
3	c3cp0A_	 Alignment		99.4	24	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
4	c2k14A_	 Alignment		99.0	19	PDB header: unknown function Chain: A: PDB Molecule: yuaf protein; PDBTitle: solution structure of the soluble domain of the nfe2 protein yuaf from bacillus subtilis
5	c3fjsC_	 Alignment		42.6	26	PDB header: biosynthetic protein Chain: C: PDB Molecule: uncharacterized protein with rmlc-like cupin fold; PDBTitle: crystal structure of a putative biosynthetic protein with rmlc-like2 cupin fold (reut_b4087) from ralstonia eutropha jmp134 at 1.90 a3 resolution
6	d1mvfd_	 Alignment		42.6	29	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: Kis/PemI addiction antidote
7	c3e0eA_	 Alignment		41.3	28	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
8	d1xrual	 Alignment		36.9	23	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Kdul-like
9	c2nv4A_	 Alignment		35.7	25	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0066 protein af_0241; PDBTitle: crystal structure of upf0066 protein af0241 in complex with2 s-adenosylmethionine. northeast structural genomics3 consortium target gr27
10	c1ywkE_	 Alignment		35.5	14	PDB header: isomerase Chain: E: PDB Molecule: 4-deoxy-l-threo-5-hexosulose-uronate ketol- PDBTitle: crystal structure of 4-deoxy-1-threo-5-hexosulose-uronate2 ketol-isomerase from enterococcus faecalis
11	c3a5zF_	 Alignment		32.3	22	PDB header: ligase Chain: F: PDB Molecule: elongation factor p; PDBTitle: crystal structure of escherichia coli genx in complex with elongation2 factor p

12	d1ywka1	Alignment		28.4	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Kdul-like
13	c2p0pA_	Alignment		27.0	15	PDB header: metal binding protein Chain: A: PDB Molecule: alr1010 protein; PDBTitle: calcium binding protein in the free form
14	d1nppa2	Alignment		26.5	21	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: N-utilization substance G protein NusG, C-terminal domain
15	c2e6zA_	Alignment		26.0	27	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt5; PDBTitle: solution structure of the second kow motif of human2 transcription elongation factor spt5
16	c3okxA_	Alignment		24.9	25	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: yaeb-like protein rpa0152; PDBTitle: crystal structure of yaeb-like protein from rhodopseudomonas palustris
17	c2yv5A_	Alignment		24.6	14	PDB header: hydrolase Chain: A: PDB Molecule: yjeq protein; PDBTitle: crystal structure of yjeq from aquifex aeolicus
18	d1ueba1	Alignment		24.4	15	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: elF5a N-terminal domain-like
19	c2ozjB_	Alignment		24.2	8	PDB header: unknown function Chain: B: PDB Molecule: cupin 2, conserved barrel; PDBTitle: crystal structure of a cupin superfamily protein (dsy2733) from2 desulfitobacterium hafniense dcb-2 at 1.60 a resolution
20	d1nnxa_	Alignment		23.9	13	Fold: OB-fold Superfamily: Hypothetical protein YgiW Family: Hypothetical protein YgiW
21	d1nz9a_	Alignment	not modelled	23.9	18	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: N-utilization substance G protein NusG, C-terminal domain
22	d1x6oa1	Alignment	not modelled	23.7	18	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: elF5a N-terminal domain-like
23	d2huha1	Alignment	not modelled	23.7	8	Fold: C2 domain-like Superfamily: Smr-associated domain-like Family: Smr-associated domain
24	d1ub4c_	Alignment	not modelled	21.8	22	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: Kis/PemI addiction antidote
25	c2qjIA_	Alignment	not modelled	21.8	16	PDB header: signaling protein Chain: A: PDB Molecule: ubiquitin-related modifier 1; PDBTitle: crystal structure of urm1
26	d1vfa1	Alignment	not modelled	21.5	18	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Alanine racemase
27	c2k6pA_	Alignment	not modelled	21.1	29	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein hp_1423; PDBTitle: solution structure of hypothetical protein, hp1423
28	d1v43a2	Alignment	not modelled	20.9	26	Fold: OB-fold Superfamily: MOP-like Family: ABC-transporter additional domain
29	d2foa1	Alignment	not modelled	20.9	13	Fold: SH3-like barrel Superfamily: SH3-domain

					Family: SH3-domain
30	d1tkea1	Alignment	not modelled	20.8	17 Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: TGS domain
31	d1u0la1	Alignment	not modelled	20.7	24 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
32	d1wgka	Alignment	not modelled	20.0	16 Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: C9orf74 homolog
33	d1xo3a	Alignment	not modelled	19.7	16 Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: C9orf74 homolog
34	d1orua	Alignment	not modelled	19.6	16 Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: MOSC (MOCO sulphurase C-terminal) domain
35	d1k25a2	Alignment	not modelled	19.5	8 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
36	c2kvqG	Alignment	not modelled	19.2	16 PDB header: transcription Chain: G: PDB Molecule: transcription antitermination protein nusg; PDBTitle: solution structure of nuse:nusg-ctd complex
37	c2jvva	Alignment	not modelled	19.2	16 PDB header: transcription Chain: A: PDB Molecule: transcription antitermination protein nusg; PDBTitle: solution structure of e. coli nusg carboxyterminal domain
38	c1xtaA	Alignment	not modelled	18.5	19 PDB header: translation Chain: A: PDB Molecule: eukaryotic initiation factor 5a; PDBTitle: structural analysis of leishmania mexicana eukaryotic initiation2 factor 5a
39	d1wfwA	Alignment	not modelled	18.5	16 Fold: SH3-like barrel Superfamily: SH3-domain Family: SH3-domain
40	d1tq5a1	Alignment	not modelled	17.9	7 Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Pirin-like
41	d1yhfa1	Alignment	not modelled	17.7	16 Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
42	c1bkbA	Alignment	not modelled	17.6	19 PDB header: translation Chain: A: PDB Molecule: translation initiation factor 5a; PDBTitle: initiation factor 5a from archeobacterium pyrobaculum2 aerophilum
43	d1whoa	Alignment	not modelled	17.3	14 Fold: C2 domain-like Superfamily: PHL pollen allergen Family: PHL pollen allergen
44	d2vv5a1	Alignment	not modelled	17.3	22 Fold: Sm-like fold Superfamily: Sm-like ribonucleoproteins Family: Mechanosensitive channel protein MscS (YggB), middle domain
45	c2pfbB	Alignment	not modelled	17.2	16 PDB header: unknown function Chain: B: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of a rmlc-like cupin (sfri_3105) from shewanella2 frigidimarina ncimb 400 at 1.90 a resolution
46	c2k9xA	Alignment	not modelled	17.0	29 PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of urm1 from trypanosoma brucei
47	c3b9bA	Alignment	not modelled	16.9	16 PDB header: hydrolase Chain: A: PDB Molecule: sarcoplasmic/endoplasmic reticulum calcium PDBTitle: structure of the e2 beryllium fluoride complex of the serca2 ca2+atpase
48	c3di4A	Alignment	not modelled	16.3	27 PDB header: metal binding protein Chain: A: PDB Molecule: uncharacterized protein duf1989; PDBTitle: crystal structure of a duf1989 family protein (spo0365) from2 silicibacter pomeroyi dss-3 at 1.60 a resolution
49	c3oyyA	Alignment	not modelled	16.2	15 PDB header: translation Chain: A: PDB Molecule: elongation factor p; PDBTitle: structure of pseudomonas aeruginosa elongation factor p
50	c2i0nA	Alignment	not modelled	15.8	9 PDB header: structural protein Chain: A: PDB Molecule: class vii unconventional myosin; PDBTitle: structure of dictyostelium discoideum myosin vii sh3 domain2 with adjacent proline rich region
51	c3fn2A	Alignment	not modelled	15.3	29 PDB header: transferase Chain: A: PDB Molecule: putative sensor histidine kinase domain; PDBTitle: crystal structure of a putative sensor histidine kinase domain from2 clostridium symbiosum atcc 14940
52	d2pi2a1	Alignment	not modelled	15.1	20 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
53	c3treA	Alignment	not modelled	14.9	15 PDB header: translation Chain: A: PDB Molecule: elongation factor p; PDBTitle: structure of a translation elongation factor p (efp) from coxiella2 burnetii
54	d1ue9a	Alignment	not modelled	14.7	22 Fold: SH3-like barrel Superfamily: SH3-domain Family: SH3-domain
55	c1vftA	Alignment	not modelled	14.7	17 PDB header: isomerase Chain: A: PDB Molecule: alanine racemase; PDBTitle: crystal structure of l-cycloserine-bound form of alanine2

						racemase from d-cycloserine-producing streptomyces3 lavendulae
56	c3e0jG_	Alignment	not modelled	14.2	13	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
57	c3oruA_	Alignment	not modelled	14.1	27	PDB header: metal binding protein Chain: A: PDB Molecule: duf1989 family protein; PDBTitle: crystal structure of a duf1989 family protein (tm1040_0329) from2 silicibacter sp. tm1040 at 1.11 a resolution
58	d2gcxa1	Alignment	not modelled	14.0	0	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: FeoA-like
59	c2jw4A_	Alignment	not modelled	13.8	6	PDB header: signaling protein Chain: A: PDB Molecule: cytoplasmic protein nck1; PDBTitle: nmr solution structure of the n-terminal sh3 domain of2 human nckalpha
60	d1dm9a_	Alignment	not modelled	13.6	11	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: Heat shock protein 15 kD
61	c1dm9A_	Alignment	not modelled	13.6	11	PDB header: structural genomics Chain: A: PDB Molecule: hypothetical 15.5 kd protein in mrca-pcka PDBTitle: heat shock protein 15 kd
62	d1zud21	Alignment	not modelled	13.3	9	Fold: beta-Grasp (ubiquitin-like) Superfamily: Moad/ThiS Family: ThiS
63	c3hksB_	Alignment	not modelled	13.1	19	PDB header: translation, rna binding protein Chain: B: PDB Molecule: eukaryotic translation initiation factor 5a-2; PDBTitle: crystal structure of eukaryotic translation initiation2 factor eif-5a2 from arabidopsis thaliana
64	d1tygb_	Alignment	not modelled	12.8	14	Fold: beta-Grasp (ubiquitin-like) Superfamily: Moad/ThiS Family: ThiS
65	d1nyra2	Alignment	not modelled	12.8	9	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: TGS domain
66	c2j6kE_	Alignment	not modelled	12.4	4	PDB header: protein binding Chain: E: PDB Molecule: cd2-associated protein; PDBTitle: n-terminal sh3 domain of cms (cd2ap human homolog)
67	c2dy3B_	Alignment	not modelled	12.2	17	PDB header: isomerase Chain: B: PDB Molecule: alanine racemase; PDBTitle: crystal structure of alanine racemase from corynebacterium glutamicum
68	c3lwcA_	Alignment	not modelled	12.1	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of structural genomics, unknown function2 (yp_766765.1) from rhizobium leguminosarum bv. viciae 3841 at 1.40 a3 resolution
69	d1wlpb1	Alignment	not modelled	11.9	26	Fold: SH3-like barrel Superfamily: SH3-domain Family: SH3-domain
70	c2eifA_	Alignment	not modelled	11.5	15	PDB header: gene regulation Chain: A: PDB Molecule: protein (eukaryotic translation initiation factor 5a); PDBTitle: eukaryotic translation initiation factor 5a from methanococcus2 jannaschii
71	c3cwiA_	Alignment	not modelled	11.1	16	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
72	d1j3ta_	Alignment	not modelled	11.1	7	Fold: SH3-like barrel Superfamily: SH3-domain Family: SH3-domain
73	c3dwmA_	Alignment	not modelled	10.9	19	PDB header: transferase Chain: A: PDB Molecule: 9.5 kda culture filtrate antigen cfp10a; PDBTitle: crystal structure of mycobacterium tuberculosis cyso, an antigen
74	c1ybyB_	Alignment	not modelled	10.8	15	PDB header: translation Chain: B: PDB Molecule: translation elongation factor p; PDBTitle: conserved hypothetical protein cth-95 from clostridium2 thermocellum
75	c1uebB_	Alignment	not modelled	10.6	15	PDB header: rna binding protein Chain: B: PDB Molecule: elongation factor p; PDBTitle: crystal structure of translation elongation factor p from2 thermus thermophilus hb8
76	d1ueba3	Alignment	not modelled	10.4	20	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
77	c3gf5A_	Alignment	not modelled	10.3	18	PDB header: structural protein Chain: A: PDB Molecule: major vault protein; PDBTitle: crystal structure of the p21 r1-r7 n-terminal domain of murine mvp
78	d1bkba1	Alignment	not modelled	10.2	20	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: eIF5a N-terminal domain-like
79	d1iz6a1	Alignment	not modelled	10.2	19	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: eIF5a N-terminal domain-like
80	c3k3sG_	Alignment	not modelled	10.1	20	PDB header: hydrolase Chain: G: PDB Molecule: altronate hydrolase; PDBTitle: crystal structure of altronate hydrolase (fragment 1-84) from shigella2 flexneri.
						PDB header: biosynthetic protein

81	cliz6B_	Alignment	not modelled	10.0	19	Chain: B: PDB Molecule: initiation factor 5a; PDBTitle: crystal structure of translation initiation factor 5a from pyrococcus2 horikoshii
82	c3i4oA_	Alignment	not modelled	10.0	15	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-1; PDBTitle: crystal structure of translation initiation factor 1 from2 mycobacterium tuberculosis
83	d2as0a1	Alignment	not modelled	10.0	35	Fold: PUA domain-like Superfamily: PUA domain-like Family: Hypothetical RNA methyltransferase domain (HRMD)
84	dloqka_	Alignment	not modelled	10.0	13	Fold: Rof/RNase P subunit-like Superfamily: Rof/RNase P subunit-like Family: RNase P subunit p29-like
85	dlvqot1	Alignment	not modelled	9.5	15	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: Ribosomal proteins L24p and L21e
86	c2rqra_	Alignment	not modelled	9.3	23	PDB header: protein binding Chain: A: PDB Molecule: engulfment and cell motility protein 1, linker, dedicator PDBTitle: the solution structure of human dock2 sh3 domain - elmo1 peptide2 chimera complex
87	c2kymA_	Alignment	not modelled	9.2	14	PDB header: signaling protein Chain: A: PDB Molecule: bud emergence protein 1; PDBTitle: solution structure of the bem1p sh3-ci domain from l.elongisporus in2 complex with ste20p peptide
88	dlpsea_	Alignment	not modelled	9.2	23	Fold: SH3-like barrel Superfamily: Electron transport accessory proteins Family: Photosystem I accessory protein E (PsaE)
89	c1y7xA_	Alignment	not modelled	9.2	11	PDB header: structural protein, protein binding Chain: A: PDB Molecule: major vault protein; PDBTitle: solution structure of a two-repeat fragment of major vault2 protein
90	d2d40a1	Alignment	not modelled	9.2	18	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: GenTisate 1,2-dioxygenase-like
91	c1tygG_	Alignment	not modelled	9.2	14	PDB header: biosynthetic protein Chain: G: PDB Molecule: yjbs; PDBTitle: structure of the thiazole synthase/this complex
92	c2jlnA_	Alignment	not modelled	9.1	21	PDB header: membrane protein Chain: A: PDB Molecule: mhp1; PDBTitle: structure of mhp1, a nucleobase-cation-symport-1 family2 transporter
93	c1zlmA_	Alignment	not modelled	9.1	5	PDB header: signaling protein Chain: A: PDB Molecule: osteoclast stimulating factor 1; PDBTitle: crystal structure of the sh3 domain of human osteoclast2 stimulating factor
94	c3p8bB_	Alignment	not modelled	9.0	30	PDB header: transferase/transcription Chain: B: PDB Molecule: transcription antitermination protein nusg; PDBTitle: x-ray crystal structure of pyrococcus furiosus transcription2 elongation factor spt4/5
95	d1m1ha1	Alignment	not modelled	8.9	15	Fold: N-utilization substance G protein NusG, insert domain Superfamily: N-utilization substance G protein NusG, insert domain Family: N-utilization substance G protein NusG, insert domain
96	dluhfa_	Alignment	not modelled	8.9	14	Fold: SH3-like barrel Superfamily: SH3-domain Family: SH3-domain
97	c4a1cS_	Alignment	not modelled	8.8	10	PDB header: ribosome Chain: S: PDB Molecule: rpl26; 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.
98	c2kq8A_	Alignment	not modelled	8.7	27	PDB header: hydrolase Chain: A: PDB Molecule: cell wall hydrolase; PDBTitle: solution nmr structure of a domain from bt9727_4915 from2 bacillus thuringiensis, northeast structural genomics3 consortium target bur95a
99	c2k6dA_	Alignment	not modelled	8.5	14	PDB header: sh3 domain/ubiquitin Chain: A: PDB Molecule: sh3 domain-containing kinase-binding protein 1; PDBTitle: cin85 sh3-c domain in complex with ubiquitin