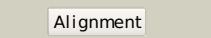
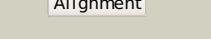
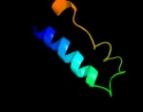
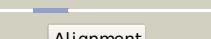


# Phyre<sup>2</sup>

Email	I.a.kelley@imperial.ac.uk
Description	P45581
Date	Thu Jan 5 12:03:27 GMT 2012
Unique Job ID	7e076a52e8988fd8

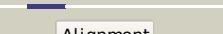
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3alyF_	 Alignment		50.6	37	<b>PDB header:</b> ribosomal protein <b>Chain:</b> F: <b>PDB Molecule:</b> 50s ribosomal protein p1 (l12p); <b>PDBTitle:</b> the structure of protein complex
2	c3trkA_	 Alignment		46.5	24	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> nonstructural polyprotein; <b>PDBTitle:</b> structure of the chikungunya virus nsp2 protease
3	d1m6ya1	 Alignment		41.3	18	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> Putative methyltransferase TM0872, insert domain <b>Family:</b> Putative methyltransferase TM0872, insert domain
4	d1sgla_	 Alignment		40.3	11	<b>Fold:</b> Ribonuclease Rh-like <b>Superfamily:</b> Ribonuclease Rh-like <b>Family:</b> Ribonuclease Rh-like
5	d1lioaa_	 Alignment		39.4	7	<b>Fold:</b> Ribonuclease Rh-like <b>Superfamily:</b> Ribonuclease Rh-like <b>Family:</b> Ribonuclease Rh-like
6	d1lor4a_	 Alignment		36.5	18	<b>Fold:</b> Globin-like <b>Superfamily:</b> Globin-like <b>Family:</b> Globins
7	d1bola_	 Alignment		33.6	7	<b>Fold:</b> Ribonuclease Rh-like <b>Superfamily:</b> Ribonuclease Rh-like <b>Family:</b> Ribonuclease Rh-like
8	c2jeuA_	 Alignment		27.4	27	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> regulatory protein e2; <b>PDBTitle:</b> transcription activator structure reveals redox control of2 a replication initiation reaction
9	d1wg8a1	 Alignment		26.7	18	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> Putative methyltransferase TM0872, insert domain <b>Family:</b> Putative methyltransferase TM0872, insert domain
10	c3d3zA_	 Alignment		25.7	15	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> actibind; <b>PDBTitle:</b> crystal structure of actibind a t2 rnase
11	d1k32a4	 Alignment		24.5	38	<b>Fold:</b> ClpP/crotonase <b>Superfamily:</b> ClpP/crotonase <b>Family:</b> Tail specific protease, catalytic domain

12	<a href="#">c2w1oA_</a>			21.4	11	<b>PDB header:</b> translation <b>Chain:</b> A: <b>PDB Molecule:</b> 60s acidic ribosomal protein p2; <b>PDBTitle:</b> nmr structure of dimerization domain of human ribosomal2 protein p2
13	<a href="#">d1ev0a_</a>			20.6	19	<b>Fold:</b> Cell division protein MinE topological specificity domain <b>Superfamily:</b> Cell division protein MinE topological specificity domain <b>Family:</b> Cell division protein MinE topological specificity domain
14	<a href="#">c2q0oC_</a>			20.4	38	<b>PDB header:</b> transcription <b>Chain:</b> C: <b>PDB Molecule:</b> probable transcriptional repressor tram; <b>PDBTitle:</b> crystal structure of an anti-activation complex in bacterial quorum2 sensing
15	<a href="#">c3iz5w_</a>			19.9	22	<b>PDB header:</b> ribosome <b>Chain:</b> W: <b>PDB Molecule:</b> 60s ribosomal protein l22 (l22e); <b>PDBTitle:</b> localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
16	<a href="#">c2rchA_</a>			19.0	26	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> cytochrome p450 74a; <b>PDBTitle:</b> crystal structure of arabidopsis thaliana allene oxide synthase (aos,2 cytochrome p450 74a, cyp74a) complexed with 13(s)-hod at 1.85 a3 resolution
17	<a href="#">c3izcw_</a>			17.8	22	<b>PDB header:</b> ribosome <b>Chain:</b> W: <b>PDB Molecule:</b> 60s ribosomal protein rpl22 (l22e); <b>PDBTitle:</b> localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
18	<a href="#">d1r6na_</a>			17.5	18	<b>Fold:</b> E2 regulatory, transactivation domain <b>Superfamily:</b> E2 regulatory, transactivation domain <b>Family:</b> E2 regulatory, transactivation domain
19	<a href="#">d1dixa_</a>			17.4	11	<b>Fold:</b> Ribonuclease Rh-like <b>Superfamily:</b> Ribonuclease Rh-like <b>Family:</b> Ribonuclease Rh-like
20	<a href="#">c2kxoA_</a>			17.1	19	<b>PDB header:</b> cell cycle <b>Chain:</b> A: <b>PDB Molecule:</b> cell division topological specificity factor; <b>PDBTitle:</b> solution nmr structure of the cell division regulator mine protein2 from neisseria gonorrhoeae
21	<a href="#">c2w31A_</a>		not modelled	16.7	15	<b>PDB header:</b> oxygen transport <b>Chain:</b> A: <b>PDB Molecule:</b> globin; <b>PDBTitle:</b> globin domain of geobacter sulfurreducens globin-coupled2 sensor
22	<a href="#">d1jy5a_</a>		not modelled	16.2	14	<b>Fold:</b> Ribonuclease Rh-like <b>Superfamily:</b> Ribonuclease Rh-like <b>Family:</b> Ribonuclease Rh-like
23	<a href="#">c1n6dE_</a>		not modelled	15.5	38	<b>PDB header:</b> hydrolase <b>Chain:</b> E: <b>PDB Molecule:</b> tricorn protease; <b>PDBTitle:</b> tricorn protease in complex with tetrapeptide chloromethyl2 ketone derivative
24	<a href="#">c1k32E_</a>		not modelled	15.5	38	<b>PDB header:</b> hydrolase <b>Chain:</b> E: <b>PDB Molecule:</b> tricorn protease; <b>PDBTitle:</b> crystal structure of the tricorn protease
25	<a href="#">c1tueG_</a>		not modelled	15.4	15	<b>PDB header:</b> replication <b>Chain:</b> G: <b>PDB Molecule:</b> regulatory protein e2; <b>PDBTitle:</b> the x-ray structure of the papillomavirus helicase in2 complex with its molecular matchmaker e2
26	<a href="#">d1tueb_</a>		not modelled	15.3	15	<b>Fold:</b> E2 regulatory, transactivation domain <b>Superfamily:</b> E2 regulatory, transactivation domain <b>Family:</b> E2 regulatory, transactivation domain
27	<a href="#">d2nnua1</a>		not modelled	15.0	15	<b>Fold:</b> E2 regulatory, transactivation domain <b>Superfamily:</b> E2 regulatory, transactivation domain <b>Family:</b> E2 regulatory, transactivation domain
28	<a href="#">d1iyba_</a>		not modelled	14.4	14	<b>Fold:</b> Ribonuclease Rh-like <b>Superfamily:</b> Ribonuclease Rh-like <b>Family:</b> Ribonuclease Rh-like
						<b>PDB header:</b> hydrolase

29	<a href="#">c1vd3A</a>	Alignment	not modelled	12.3	15	<b>Chain:</b> A: <b>PDB Molecule:</b> rnase ngr3; <b>PDBTitle:</b> ribonuclease nt in complex with 2'-ump
30	<a href="#">d1faoa</a>	Alignment	not modelled	11.8	15	<b>Fold:</b> PH domain-like barrel <b>Superfamily:</b> PH domain-like <b>Family:</b> Pleckstrin-homology domain (PH domain)
31	<a href="#">c1faoA</a>	Alignment	not modelled	11.8	15	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> dual adaptor of phosphotyrosine and 3- <b>PDBTitle:</b> structure of the pleckstrin homology domain from2 dapp1/phish in complex with inositol 1,3,4,5-4 tetrakisphosphate
32	<a href="#">c1m6yA</a>	Alignment	not modelled	11.4	17	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> s-adenosyl-methyltransferase mraw; <b>PDBTitle:</b> crystal structure analysis of tm0872, a putative sam-2 dependent methyltransferase, complexed with sah
33	<a href="#">d2p5ka1</a>	Alignment	not modelled	11.4	29	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Arginine repressor (ArgR), N-terminal DNA-binding domain
34	<a href="#">c3uo9B</a>	Alignment	not modelled	10.9	15	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> B: <b>PDB Molecule:</b> glutaminase kidney isoform, mitochondrial; <b>PDBTitle:</b> crystal structure of human gac in complex with glutamate and bptes
35	<a href="#">d1wsca1</a>	Alignment	not modelled	10.6	18	<b>Fold:</b> AMMECR1-like <b>Superfamily:</b> AMMECR1-like <b>Family:</b> AMMECR1-like
36	<a href="#">c3ayhA</a>	Alignment	not modelled	10.5	13	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> dna-directed rna polymerase iii subunit rpc9; <b>PDBTitle:</b> crystal structure of the c17/25 subcomplex from s. pombe rna2 polymerase iii
37	<a href="#">d1aoya</a>	Alignment	not modelled	10.3	23	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Arginine repressor (ArgR), N-terminal DNA-binding domain
38	<a href="#">c3b73A</a>	Alignment	not modelled	10.3	8	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> phih1 repressor-like protein; <b>PDBTitle:</b> crystal structure of the phih1 repressor-like protein from2 haloarcula marismortui
39	<a href="#">c1b4aA</a>	Alignment	not modelled	10.2	29	<b>PDB header:</b> repressor <b>Chain:</b> A: <b>PDB Molecule:</b> arginine repressor; <b>PDBTitle:</b> structure of the arginine repressor from bacillus stearothermophilus
40	<a href="#">d1xdza</a>	Alignment	not modelled	10.1	24	<b>Fold:</b> S-adenosyl-L-methionine-dependent methyltransferases <b>Superfamily:</b> S-adenosyl-L-methionine-dependent methyltransferases <b>Family:</b> Glucose-inhibited division protein B (GidB)
41	<a href="#">d1f9na1</a>	Alignment	not modelled	10.1	29	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Arginine repressor (ArgR), N-terminal DNA-binding domain
42	<a href="#">c2p0vA</a>	Alignment	not modelled	10.0	24	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein bt3781; <b>PDBTitle:</b> crystal structure of bt3781 protein from bacteroides2 thetaiotaomicron, northeast structural genomics target3 bt58
43	<a href="#">d2p0val</a>	Alignment	not modelled	10.0	24	<b>Fold:</b> alpha/alpha toroid <b>Superfamily:</b> Six-hairpin glycosidases <b>Family:</b> CPF0428-like
44	<a href="#">d1v9va1</a>	Alignment	not modelled	9.7	19	<b>Fold:</b> Bromodomain-like <b>Superfamily:</b> MAST3 pre-PK domain-like <b>Family:</b> MAST3 pre-PK domain-like
45	<a href="#">d2nvpa1</a>	Alignment	not modelled	9.3	33	<b>Fold:</b> alpha/alpha toroid <b>Superfamily:</b> Six-hairpin glycosidases <b>Family:</b> CPF0428-like
46	<a href="#">d1b4aa1</a>	Alignment	not modelled	9.2	29	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Arginine repressor (ArgR), N-terminal DNA-binding domain
47	<a href="#">c3ereD</a>	Alignment	not modelled	9.1	36	<b>PDB header:</b> dna binding protein/dna <b>Chain:</b> D: <b>PDB Molecule:</b> arginine repressor; <b>PDBTitle:</b> crystal structure of the arginine repressor protein from mycobacterium2 tuberculosis in complex with the dna operator
48	<a href="#">d2nn5a1</a>	Alignment	not modelled	8.6	24	<b>Fold:</b> TBP-like <b>Superfamily:</b> Bet v1-like <b>Family:</b> AHSA1 domain
49	<a href="#">c2kxwB</a>	Alignment	not modelled	8.3	50	<b>PDB header:</b> calcium-binding protein/metal transport <b>Chain:</b> B: <b>PDB Molecule:</b> sodium channel protein type 2 subunit alpha; <b>PDBTitle:</b> structure of the c-domain fragment of apo calmodulin bound to the iq2 motif of nav1.2
50	<a href="#">d1eo0a</a>	Alignment	not modelled	7.8	21	<b>Fold:</b> N-cbl like <b>Superfamily:</b> Conserved domain common to transcription factors TFIIS, elongin A, CRSP70 <b>Family:</b> Conserved domain common to transcription factors TFIIS, elongin A, CRSP70
51	<a href="#">c2dymE</a>	Alignment	not modelled	7.8	8	<b>PDB header:</b> protein turnover/protein turnover <b>Chain:</b> E: <b>PDB Molecule:</b> autophagy protein 5; <b>PDBTitle:</b> the crystal structure of saccharomyces cerevisiae atg5-2 atg16(1-46) complex
52	<a href="#">c3ivuB</a>	Alignment	not modelled	7.6	18	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> homocitrate synthase, mitochondrial; <b>PDBTitle:</b> homocitrate synthase lys4 bound to 2-og
53	<a href="#">c3r9jD</a>	Alignment	not modelled	7.6	19	<b>PDB header:</b> cell cycle,hydrolase/cell cycle <b>Chain:</b> D: <b>PDB Molecule:</b> cell division topological specificity factor; <b>PDBTitle:</b> 4.3a resolution structure of a mind-mine(i24n) protein complex
54	<a href="#">d2c35a1</a>	Alignment	not modelled	7.4	17	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> HRDC-like <b>Family:</b> RNA polymerase II subunit RBP4 (RpoF)

55	<a href="#">c3ss4C_</a>	Alignment	not modelled	7.4	15	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> glutaminase c; <b>PDBTitle:</b> crystal structure of mouse glutaminase c, phosphate-bound form
56	<a href="#">c3htuE_</a>	Alignment	not modelled	7.2	20	<b>PDB header:</b> protein transport <b>Chain:</b> E: <b>PDB Molecule:</b> vacuolar protein-sorting-associated protein 25; <b>PDBTitle:</b> crystal structure of the human vps25-vps20 subcomplex
57	<a href="#">d2etha1</a>	Alignment	not modelled	6.7	7	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> MarR-like transcriptional regulators
58	<a href="#">c2q9rA_</a>	Alignment	not modelled	6.6	29	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> protein of unknown function; <b>PDBTitle:</b> crystal structure of a duf416 family protein (sbal_3149) from2 shewanella baltica os155 at 1.91 a resolution
59	<a href="#">c3izct_</a>	Alignment	not modelled	6.5	25	<b>PDB header:</b> ribosome <b>Chain:</b> T: <b>PDB Molecule:</b> 60s ribosomal protein rpl19 (l19e); <b>PDBTitle:</b> localization of the large subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
60	<a href="#">c3lvuB_</a>	Alignment	not modelled	6.5	13	<b>PDB header:</b> transport protein <b>Chain:</b> B: <b>PDB Molecule:</b> abc transporter, periplasmic substrate-binding protein; <b>PDBTitle:</b> crystal structure of abc transporter, periplasmic substrate-binding2 protein spo2066 from silicibacter pomeroyi
61	<a href="#">d1wjta_</a>	Alignment	not modelled	6.4	23	<b>Fold:</b> N-cbl like <b>Superfamily:</b> Conserved domain common to transcription factors TFIIS, elongin A, CRSP70 <b>Family:</b> Conserved domain common to transcription factors TFIIS, elongin A, CRSP70
62	<a href="#">d2c0sa1</a>	Alignment	not modelled	6.4	38	<b>Fold:</b> ROP-like <b>Superfamily:</b> BAS1536-like <b>Family:</b> BAS1536-like
63	<a href="#">c3v4gA_</a>	Alignment	not modelled	6.3	23	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> arginine repressor; <b>PDBTitle:</b> 1.60 angstrom resolution crystal structure of an arginine repressor2 from vibrio vulnificus cmcp6
64	<a href="#">c2kwuA_</a>	Alignment	not modelled	6.3	38	<b>PDB header:</b> protein binding/signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> dna polymerase iota; <b>PDBTitle:</b> solution structure of ubm2 of murine polymerase iota in complex with2 ubiquitin
65	<a href="#">d1zq7a1</a>	Alignment	not modelled	6.3	19	<b>Fold:</b> AMMECR1-like <b>Superfamily:</b> AMMECR1-like <b>Family:</b> AMMECR1-like
66	<a href="#">d2ea9a1</a>	Alignment	not modelled	6.3	42	<b>Fold:</b> Profilin-like <b>Superfamily:</b> YeeU-like <b>Family:</b> YagB/YeeU/YfjZ-like
67	<a href="#">d1wfya_</a>	Alignment	not modelled	6.0	39	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> Ras-binding domain, RBD
68	<a href="#">d2h28a1</a>	Alignment	not modelled	6.0	39	<b>Fold:</b> Profilin-like <b>Superfamily:</b> YeeU-like <b>Family:</b> YagB/YeeU/YfjZ-like
69	<a href="#">c2wqmA_</a>	Alignment	not modelled	5.8	14	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase nek7; <b>PDBTitle:</b> structure of apo human nek7
70	<a href="#">d2dy1a4</a>	Alignment	not modelled	5.8	31	<b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> EF-G C-terminal domain-like <b>Family:</b> EF-G/eEF-2 domains III and V
71	<a href="#">c1wlzD_</a>	Alignment	not modelled	5.6	20	<b>PDB header:</b> unknown function <b>Chain:</b> D: <b>PDB Molecule:</b> cap-binding protein complex interacting protein <b>PDBTitle:</b> crystal structure of djbp fragment which was obtained by2 limited proteolysis
72	<a href="#">d1wlza1</a>	Alignment	not modelled	5.6	20	<b>Fold:</b> EF Hand-like <b>Superfamily:</b> EF-hand <b>Family:</b> EF-hand modules in multidomain proteins
73	<a href="#">d1gh6a_</a>	Alignment	not modelled	5.6	15	<b>Fold:</b> Long alpha-hairpin <b>Superfamily:</b> Chaperone J-domain <b>Family:</b> Chaperone J-domain
74	<a href="#">d2fceal</a>	Alignment	not modelled	5.6	25	<b>Fold:</b> EF Hand-like <b>Superfamily:</b> EF-hand <b>Family:</b> Calmodulin-like
75	<a href="#">d1iira_</a>	Alignment	not modelled	5.6	26	<b>Fold:</b> UDP-Glycosyltransferase/glycogen phosphorylase <b>Superfamily:</b> UDP-Glycosyltransferase/glycogen phosphorylase <b>Family:</b> Gtf glycosyltransferase
76	<a href="#">d1mw7a_</a>	Alignment	not modelled	5.6	23	<b>Fold:</b> YebC-like <b>Superfamily:</b> YebC-like <b>Family:</b> YebC-like
77	<a href="#">d1ucda_</a>	Alignment	not modelled	5.5	11	<b>Fold:</b> Ribonuclease Rh-like <b>Superfamily:</b> Ribonuclease Rh-like <b>Family:</b> Ribonuclease Rh-like
78	<a href="#">d2inwa1</a>	Alignment	not modelled	5.5	44	<b>Fold:</b> Profilin-like <b>Superfamily:</b> YeeU-like <b>Family:</b> YagB/YeeU/YfjZ-like
79	<a href="#">c2ckzC_</a>	Alignment	not modelled	5.3	21	<b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> dna-directed rna polymerase iii 18 kd <b>PDBTitle:</b> x-ray structure of rna polymerase iii subcomplex c17-c25.
80	<a href="#">c2k42A_</a>	Alignment	not modelled	5.3	11	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> wiskott-aldrich syndrome protein; <b>PDBTitle:</b> solution structure of the gtpase binding domain of wasp

					in2 complex with espfu, an ehec effector
81	<a href="#">d2nxpa1</a>		Alignment	not modelled	5.2
82	<a href="#">c2p6pB_</a>		Alignment	not modelled	5.2
83	<a href="#">c1wg8B_</a>		Alignment	not modelled	5.1