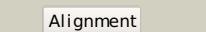
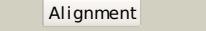
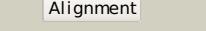
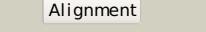
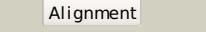
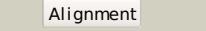
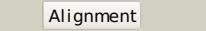


# Phyre<sup>2</sup>

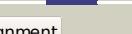
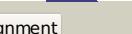
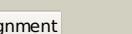
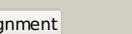
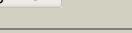
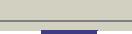
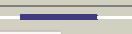
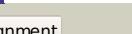
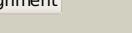
Email	i.a.kelley@imperial.ac.uk
Description	P0AA04
Date	Thu Jan 5 11:11:42 GMT 2012
Unique Job ID	8b5b30cafa3af001

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1cm3a_</a>			100.0	98	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
2	<a href="#">d1ka5a_</a>			100.0	33	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
3	<a href="#">c3ihsB_</a>			100.0	37	<b>PDB header:</b> transport protein <b>Chain:</b> B; <b>PDB Molecule:</b> phosphocarrier protein hpr; <b>PDBTitle:</b> crystal structure of a phosphocarrier protein hpr from2 bacillus anthracis str. ames
4	<a href="#">d1mola_</a>			100.0	46	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
5	<a href="#">d1ptfa_</a>			100.0	35	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
6	<a href="#">d1qr5a_</a>			100.0	35	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
7	<a href="#">c3le1B_</a>			100.0	43	<b>PDB header:</b> transferase <b>Chain:</b> B; <b>PDB Molecule:</b> phosphotransferase system, hpr-related proteins; <b>PDBTitle:</b> crystal structure of apohpr monomer from thermoanaerobacter2 tengcongensis
8	<a href="#">d1pcha_</a>			100.0	34	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
9	<a href="#">d2hpра_</a>			100.0	36	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
10	<a href="#">d1zvvj1</a>			100.0	45	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
11	<a href="#">d2nzul1</a>			100.0	40	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like

12	<a href="#">d1vq3a_</a>	Alignment		63.6	32	<b>Fold:</b> PurS-like <b>Superfamily:</b> PurS-like <b>Family:</b> PurS subunit of FGAM synthetase
13	<a href="#">c2dgbA_</a>	Alignment		60.6	16	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein purS; <b>PDBTitle:</b> structure of thermus thermophilus purS in the p21 form
14	<a href="#">c2jpiA_</a>	Alignment		58.0	14	<b>PDB header:</b> structural genomics <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> chemical shift assignments of pa4090 from pseudomonas2 aeruginosa
15	<a href="#">d1gtda_</a>	Alignment		50.4	10	<b>Fold:</b> PurS-like <b>Superfamily:</b> PurS-like <b>Family:</b> PurS subunit of FGAM synthetase
16	<a href="#">c2zw2B_</a>	Alignment		42.4	23	<b>PDB header:</b> ligase <b>Chain:</b> B: <b>PDB Molecule:</b> putative uncharacterized protein sts178; <b>PDBTitle:</b> crystal structure of formylglycinamide ribonucleotide amidotransferase2 iii from sulfolobus tokodaii (stpurS)
17	<a href="#">c3goeA_</a>	Alignment		42.1	13	<b>PDB header:</b> recombination, replication <b>Chain:</b> A: <b>PDB Molecule:</b> dna repair protein rad60; <b>PDBTitle:</b> molecular mimicry of sumo promotes dna repair
18	<a href="#">c2ekeC_</a>	Alignment		18.4	13	<b>PDB header:</b> ligase/protein binding <b>Chain:</b> C: <b>PDB Molecule:</b> ubiquitin-like protein smt3; <b>PDBTitle:</b> structure of a sumo-binding-motif mimic bound to smt3p-2 ubc9p: conservation of a noncovalent ubiquitin-like3 protein-e2 complex as a platform for selective4 interactions within a sumo pathway
19	<a href="#">d2etna2</a>	Alignment		14.9	21	<b>Fold:</b> FKBP-like <b>Superfamily:</b> FKBP-like <b>Family:</b> GreA transcript cleavage factor, C-terminal domain
20	<a href="#">c2etna_</a>	Alignment		13.4	21	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> anti-cleavage anti-greA transcription factor <b>PDBTitle:</b> crystal structure of thermus aquaticus gfh1
21	<a href="#">d1t4aa_</a>	Alignment	not modelled	13.2	13	<b>Fold:</b> PurS-like <b>Superfamily:</b> PurS-like <b>Family:</b> PurS subunit of FGAM synthetase
22	<a href="#">d1yema_</a>	Alignment	not modelled	12.8	21	<b>Fold:</b> CYTH-like phosphatases <b>Superfamily:</b> CYTH-like phosphatases <b>Family:</b> CYTH domain
23	<a href="#">d1srva_</a>	Alignment	not modelled	12.6	19	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> GroEL apical domain-like <b>Family:</b> GroEL-like chaperone, apical domain
24	<a href="#">d1r11a3</a>	Alignment	not modelled	12.3	17	<b>Fold:</b> MutS N-terminal domain-like <b>Superfamily:</b> tRNA-intron endonuclease N-terminal domain-like <b>Family:</b> tRNA-intron endonuclease N-terminal domain-like
25	<a href="#">c2e6gl_</a>	Alignment	not modelled	12.2	20	<b>PDB header:</b> hydrolase <b>Chain:</b> I: <b>PDB Molecule:</b> 5'-nucleotidase suse; <b>PDBTitle:</b> crystal structure of the stationary phase survival protein suse from thermus thermophilus hb8 in complex with phosphate
26	<a href="#">c2dc4A_</a>	Alignment	not modelled	11.2	11	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> 165aa long hypothetical protein; <b>PDBTitle:</b> structure of ph1012 protein from pyrococcus horikoshii ot3
27	<a href="#">d1dk7a_</a>	Alignment	not modelled	11.2	19	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> GroEL apical domain-like <b>Family:</b> GroEL-like chaperone, apical domain
28	<a href="#">d2vbual</a>	Alignment	not modelled	10.9	31	<b>Fold:</b> Reductase/isomerase/elongation factor common domain <b>Superfamily:</b> Riboflavin kinase-like <b>Family:</b> CTP-dependent riboflavin kinase-like
						<b>PDB header:</b> ligand binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> putative ligand binding protein;

29	<a href="#">c3k6qB</a>	Alignment	not modelled	10.1	29	<b>PDBTitle:</b> crystal structure of an antitoxin part of a putative toxin/antitoxin2 system (swol_0700) from syntrophomonas wolfei subsp. wolfei at 1.80 a3 resolution
30	<a href="#">d2f23a2</a>	Alignment	not modelled	10.0	23	<b>Fold:</b> FKBP-like <b>Superfamily:</b> FKBP-like <b>Family:</b> GreA transcript cleavage factor, C-terminal domain
31	<a href="#">c3bmbB</a>	Alignment	not modelled	10.0	20	<b>PDB header:</b> rna binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> regulator of nucleoside diphosphate kinase; <b>PDBTitle:</b> crystal structure of a new rna polymerase interacting2 protein
32	<a href="#">d1we3a2</a>	Alignment	not modelled	9.5	20	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> GroEL apical domain-like <b>Family:</b> GroEL-like chaperone, apical domain
33	<a href="#">d1l5xa</a>	Alignment	not modelled	9.1	17	<b>Fold:</b> SurE-like <b>Superfamily:</b> SurE-like <b>Family:</b> SurE-like
34	<a href="#">c2pn0D</a>	Alignment	not modelled	8.7	26	<b>PDB header:</b> transcription <b>Chain:</b> D: <b>PDB Molecule:</b> prokaryotic transcription elongation factor <b>PDBTitle:</b> prokaryotic transcription elongation factor grea/greb from2 nitrosomonas europaea
35	<a href="#">d1euvb</a>	Alignment	not modelled	8.6	13	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> Ubiquitin-related
36	<a href="#">d1aopa2</a>	Alignment	not modelled	8.6	24	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Nitrite/Sulfite reductase N-terminal domain-like <b>Family:</b> Duplicated SIR/NIR-like domains 1 and 3
37	<a href="#">d1sjpa2</a>	Alignment	not modelled	8.6	23	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> GroEL apical domain-like <b>Family:</b> GroEL-like chaperone, apical domain
38	<a href="#">c3m6cA</a>	Alignment	not modelled	8.1	23	<b>PDB header:</b> chaperone <b>Chain:</b> A: <b>PDB Molecule:</b> 60 kda chaperonin 1; <b>PDBTitle:</b> crystal structure of mycobacterium tuberculosis groel1 apical domain
39	<a href="#">c2p4vA</a>	Alignment	not modelled	8.1	15	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> transcription elongation factor greb; <b>PDBTitle:</b> crystal structure of the transcript cleavage factor, greb2 at 2.6a resolution
40	<a href="#">d1w96c1</a>	Alignment	not modelled	7.8	38	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
41	<a href="#">c2I66B</a>	Alignment	not modelled	7.8	13	<b>PDB header:</b> transcription regulator <b>Chain:</b> B: <b>PDB Molecule:</b> transcriptional regulator, abrb family; <b>PDBTitle:</b> the dna-recognition fold of sso7c4 suggests a new member of spovt-abrb2 superfamily from archaea.
42	<a href="#">c2v4oB</a>	Alignment	not modelled	7.6	17	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> multifunctional protein sur e; <b>PDBTitle:</b> crystal structure of salmonella typhimurium sur e at 2.752 angstrom resolution in monoclinic form
43	<a href="#">d1grja2</a>	Alignment	not modelled	7.6	26	<b>Fold:</b> FKBP-like <b>Superfamily:</b> FKBP-like <b>Family:</b> GreA transcript cleavage factor, C-terminal domain
44	<a href="#">c2jxxA</a>	Alignment	not modelled	7.4	14	<b>PDB header:</b> protein binding <b>Chain:</b> A: <b>PDB Molecule:</b> nfatc2-interacting protein; <b>PDBTitle:</b> nmr solution structure of ubiquitin-like domain of2 nfatc2ip. northeast structural genomics consortium target3 hr5627
45	<a href="#">d2fy9a1</a>	Alignment	not modelled	7.4	12	<b>Fold:</b> Double-split beta-barrel <b>Superfamily:</b> AbrB/MazE/MraZ-like <b>Family:</b> AbrB N-terminal domain-like
46	<a href="#">c1ztgD</a>	Alignment	not modelled	7.3	7	<b>PDB header:</b> dna, rna binding protein/dna <b>Chain:</b> D: <b>PDB Molecule:</b> poly(rc)-binding protein 1; <b>PDBTitle:</b> human alpha polyc binding protein kh1
47	<a href="#">d1yfb1</a>	Alignment	not modelled	7.1	29	<b>Fold:</b> Double-split beta-barrel <b>Superfamily:</b> AbrB/MazE/MraZ-like <b>Family:</b> AbrB N-terminal domain-like
48	<a href="#">d1kida</a>	Alignment	not modelled	6.9	20	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> GroEL apical domain-like <b>Family:</b> GroEL-like chaperone, apical domain
49	<a href="#">d1b5sa</a>	Alignment	not modelled	6.8	33	<b>Fold:</b> CoA-dependent acyltransferases <b>Superfamily:</b> CoA-dependent acyltransferases <b>Family:</b> CAT-like
50	<a href="#">d1ulza1</a>	Alignment	not modelled	6.8	13	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
51	<a href="#">d2uyzb1</a>	Alignment	not modelled	6.6	11	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> Ubiquitin-related
52	<a href="#">c1ibaA</a>	Alignment	not modelled	6.5	12	<b>PDB header:</b> phosphotransferase <b>Chain:</b> A: <b>PDB Molecule:</b> glucose permease; <b>PDBTitle:</b> glucose permease (domain iib), nmr, 11 structures
53	<a href="#">d2io3b1</a>	Alignment	not modelled	6.3	7	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> Ubiquitin-related
54	<a href="#">c2ro5B</a>	Alignment	not modelled	6.2	22	<b>PDB header:</b> transcription <b>Chain:</b> B: <b>PDB Molecule:</b> stage v sporulation protein t; <b>PDBTitle:</b> rdc-refined solution structure of the n-terminal dna2 recognition domain of the bacillus subtilis transition-3 state regulator spovt <b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> lipoamide acyltransferase component of

55	<a href="#">c2ii4C</a>		not modelled	6.2	5	branched-chain <b>PDBTitle:</b> crystal structure of a cubic core of the dihydrolipoamide2 acyltransferase (e2b) component in the branched-chain alpha-ketoacid3 dehydrogenase complex (bckdc), coenzyme a-bound form
56	<a href="#">d1dpba</a>		not modelled	6.2	19	<b>Fold:</b> CoA-dependent acyltransferases <b>Superfamily:</b> CoA-dependent acyltransferases <b>Family:</b> CAT-like
57	<a href="#">c2yx5A</a>		not modelled	6.1	23	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> upf0062 protein mj1593; <b>PDBTitle:</b> crystal structure of methanocaldococcus jannaschii purs, one of the2 subunits of formylglycinamide ribonucleotide amidotransferase in the3 purine biosynthetic pathway
58	<a href="#">d2j9ga1</a>		not modelled	6.1	22	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
59	<a href="#">d1q2ha</a>		not modelled	6.1	50	<b>Fold:</b> Dimerisation interlock <b>Superfamily:</b> Phenylalanine zipper <b>Family:</b> Adapter protein APS, dimerisation domain
60	<a href="#">c2w1tB</a>		not modelled	6.0	24	<b>PDB header:</b> transcription <b>Chain:</b> B: <b>PDB Molecule:</b> stage v sporulation protein t; <b>PDBTitle:</b> crystal structure of b. subtilis spvt
61	<a href="#">d2bfd2</a>		not modelled	5.8	21	<b>Fold:</b> TK C-terminal domain-like <b>Superfamily:</b> TK C-terminal domain-like <b>Family:</b> Branched-chain alpha-keto acid dehydrogenase beta-subunit, C-terminal-domain
62	<a href="#">c3gebC</a>		not modelled	5.6	14	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> eyes absent homolog 2; <b>PDBTitle:</b> crystal structure of edeya2
63	<a href="#">c2hjwA</a>		not modelled	5.4	25	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> acetyl-coa carboxylase 2; <b>PDBTitle:</b> crystal structure of the bc domain of acc2
64	<a href="#">d1j9ja</a>		not modelled	5.3	13	<b>Fold:</b> SurE-like <b>Superfamily:</b> SurE-like <b>Family:</b> SurE-like
65	<a href="#">c2k8hA</a>		not modelled	5.3	13	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> small ubiquitin protein; <b>PDBTitle:</b> solution structure of sumo from trypanosoma brucei
66	<a href="#">d1w96a1</a>		not modelled	5.1	38	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
67	<a href="#">d1oela2</a>		not modelled	5.1	18	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> GroEL apical domain-like <b>Family:</b> GroEL-like chaperone, apical domain