

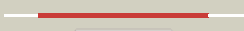





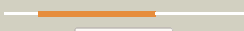







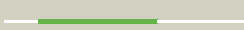

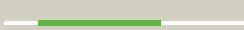





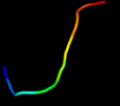



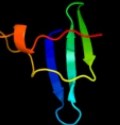




Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P0AAM7
Date	Thu Jan 5 11:13:19 GMT 2012
Unique Job ID	8ba12a15c4edb1d4

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3d3rA_	 Alignment		100.0	32	PDB header: chaperone Chain: A: PDB Molecule: hydrogenase assembly chaperone hupc/hupf; PDBTitle: crystal structure of the hydrogenase assembly chaperone hupc/hupf2 family protein from shewanella oneidensis mr-1
2	d2ot2a1	 Alignment		99.9	57	Fold: OB-fold Superfamily: HupF/HypC-like Family: HupF/HypC-like
3	d3d3ra1	 Alignment		99.9	32	Fold: OB-fold Superfamily: HupF/HypC-like Family: HupF/HypC-like
4	d2z1ca1	 Alignment		99.9	38	Fold: OB-fold Superfamily: HupF/HypC-like Family: HupF/HypC-like
5	d1rl2a2	 Alignment		80.6	28	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
6	c2rcnA_	 Alignment		67.5	26	PDB header: hydrolase Chain: A: PDB Molecule: probable gtpase engc; PDBTitle: crystal structure of the ribosomal interacting gtpase yjeq from the2 enterobacterial species salmonella typhimurium.
7	d1vqoa2	 Alignment		66.7	24	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
8	c4a2iV_	 Alignment		65.4	26	PDB header: ribosome/hydrolase Chain: V: PDB Molecule: putative ribosome biogenesis gtpase rsga; PDBTitle: cryo-electron microscopy structure of the 30s subunit in complex with2 the yjeq biogenesis factor
9	d2zjra2	 Alignment		56.1	34	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
10	c1u0lB_	 Alignment		55.1	18	PDB header: hydrolase Chain: B: PDB Molecule: probable gtpase engc; PDBTitle: crystal structure of yjeq from thermotoga maritima
11	c2dgyA_	 Alignment		54.3	16	PDB header: translation Chain: A: PDB Molecule: mgc11102 protein; PDBTitle: solution structure of the eukaryotic initiation factor 1a2 in mgc11102 protein

12	c2yv5A_	Alignment		54.1	17	PDB header: hydrolase Chain: A: PDB Molecule: yjeq protein; PDBTitle: crystal structure of yjeq from aquifex aeolicus
13	c3mxnB_	Alignment		53.7	18	PDB header: replication Chain: B: PDB Molecule: recq-mediated genome instability protein 2; PDBTitle: crystal structure of the rmi core complex
14	c1g0dA_	Alignment		43.4	33	PDB header: transferase Chain: A: PDB Molecule: protein-glutamine gamma-glutamyltransferase; PDBTitle: crystal structure of red sea bream transglutaminase
15	c1kv3F_	Alignment		42.5	44	PDB header: transferase Chain: F: PDB Molecule: protein-glutamine gamma-glutamyltransferase; PDBTitle: human tissue transglutaminase in gdp bound form
16	c1l9mB_	Alignment		42.3	33	PDB header: transferase Chain: B: PDB Molecule: protein-glutamine glutamyltransferase e3; PDBTitle: three-dimensional structure of the human transglutaminase 32 enzyme: binding of calcium ions change structure for3 activation
17	c1f13A_	Alignment		40.0	33	PDB header: coagulation factor Chain: A: PDB Molecule: cellular coagulation factor xiii zymogen; PDBTitle: recombinant human cellular coagulation factor xiii
18	c2oqkA_	Alignment		39.7	34	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
19	d2j01d2	Alignment		37.2	27	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
20	d1ny4a_	Alignment		35.6	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
21	d2qamc2	Alignment	not modelled	35.4	22	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
22	d1jt8a_	Alignment	not modelled	34.9	16	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
23	d1g0da4	Alignment	not modelled	33.7	30	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core
24	d1d7qa_	Alignment	not modelled	33.3	19	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
25	d1njib1	Alignment	not modelled	33.1	33	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
26	d2q3za4	Alignment	not modelled	32.8	44	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core
27	d1ex0a4	Alignment	not modelled	31.3	30	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Transglutaminase core
28	c1t9hA_	Alignment	not modelled	31.2	9	PDB header: hydrolase Chain: A: PDB Molecule: probable gtpase engc; PDBTitle: the crystal structure of yloq, a circularly permuted gtpase.
29	d1vjja4	Alignment	not modelled	29.6	30	Fold: Cysteine proteinases Superfamily: Cysteine proteinases

						Family: Transglutaminase core
30	c2xzm1	Alignment	not modelled	29.1	19	PDB header: ribosome Chain: 1: PDB Molecule: ribosomal protein s28e containing protein; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 1
31	d2toda1	Alignment	not modelled	28.4	33	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
32	c1rl2A	Alignment	not modelled	28.3	17	PDB header: ribosomal protein Chain: A: PDB Molecule: protein (ribosomal protein l2); PDBTitle: ribosomal protein l2 rna-binding domain from bacillus2 stearothermophilus
33	d1d7ka1	Alignment	not modelled	27.1	33	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
34	d1ne3a	Alignment	not modelled	26.7	18	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
35	c1njcC	Alignment	not modelled	23.3	33	PDB header: lyase Chain: C: PDB Molecule: ornithine decarboxylase; PDBTitle: crystal structure determination of t. brucei ornithine2 decarboxylase bound to d-ornithine and to g418
36	c3i4oA	Alignment	not modelled	22.8	21	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if-1; PDBTitle: crystal structure of translation initiation factor 1 from2 mycobacterium tuberculosis
37	c3fp9E	Alignment	not modelled	22.8	24	PDB header: hydrolase Chain: E: PDB Molecule: proteasome-associated atpase; PDBTitle: crystal structure of intern domain of proteasome-associated2 atpase, mycobacterium tuberculosis
38	d1f3ta1	Alignment	not modelled	22.3	33	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
39	c2hc8A	Alignment	not modelled	22.2	24	PDB header: transport protein Chain: A: PDB Molecule: cation-transporting atpase, p-type; PDBTitle: structure of the a. fulgidus copa a-domain
40	cloy5B	Alignment	not modelled	20.2	22	PDB header: transferase Chain: B: PDB Molecule: trna (guanine-n(1)-methyltransferase; PDBTitle: crystal structure of trna (m1g37) methyltransferase from aquifex2 aeolicus
41	d1u0la1	Alignment	not modelled	19.7	18	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
42	d1knwa1	Alignment	not modelled	19.5	25	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
43	c2qghA	Alignment	not modelled	19.5	17	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure of diaminopimelate decarboxylase from helicobacter2 pylori complexed with l-lysine
44	d1t9ha1	Alignment	not modelled	19.1	14	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
45	d7odca1	Alignment	not modelled	18.6	33	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
46	dloy5a	Alignment	not modelled	18.3	22	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: tRNA(m1G37)-methyltransferase TrmD
47	c1xnil	Alignment	not modelled	17.8	19	PDB header: cell cycle Chain: I: PDB Molecule: tumor suppressor p53-binding protein 1; PDBTitle: tandem tudor domain of 53bp1
48	d1twia1	Alignment	not modelled	17.8	8	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
49	c2p3eA	Alignment	not modelled	16.9	17	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure of aq1208 from aquifex aeolicus
50	c1kqsA	Alignment	not modelled	16.5	24	PDB header: ribosome Chain: A: PDB Molecule: ribosomal protein l2; PDBTitle: the haloarcula marismortui 50s complexed with a2 pretranslocational intermediate in protein synthesis
51	c2nvaH	Alignment	not modelled	15.5	33	PDB header: lyase Chain: H: PDB Molecule: arginine decarboxylase, a207r protein; PDBTitle: the x-ray crystal structure of the paramecium bursaria2 chlorella virus arginine decarboxylase bound to agmatine
52	c1knwA	Alignment	not modelled	14.9	25	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure of diaminopimelate decarboxylase
53	d3pnpa	Alignment	not modelled	14.4	22	Fold: Phosphorylase/hydrolase-like Superfamily: Purine and uridine phosphorylases Family: Purine and uridine phosphorylases
54	c2yxxA	Alignment	not modelled	14.3	25	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure analysis of diaminopimelate decarboxylate (lysa)
55	c1yr3A	Alignment	not modelled	13.7	15	PDB header: transferase Chain: A: PDB Molecule: xanthosine phosphorylase; PDBTitle: escherichia coli purine nucleoside phosphorylase ii, the2 product of the xapa gene

56	d1p3ha_	Alignment	not modelled	13.6	28	Fold: GroES-like Superfamily: GroES-like Family: GroES
57	d1p3qq_	Alignment	not modelled	13.5	33	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
58	c1w4sA_	Alignment	not modelled	13.4	38	PDB header: nuclear protein Chain: A: PDB Molecule: polybromo 1 protein; PDBTitle: crystal structure of the proximal bah domain of polybromo
59	d1aono_	Alignment	not modelled	13.3	24	Fold: GroES-like Superfamily: GroES-like Family: GroES
60	d1cb0a_	Alignment	not modelled	13.2	11	Fold: Phosphorylase/hydrolase-like Superfamily: Purine and uridine phosphorylases Family: Purine and uridine phosphorylases
61	d1fr3a_	Alignment	not modelled	12.9	11	Fold: OB-fold Superfamily: MOP-like Family: Molybdate/tungstate binding protein MOP
62	d2id1a1	Alignment	not modelled	12.8	27	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: IojaP/YbeB-like
63	d1uala_	Alignment	not modelled	12.7	38	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: tRNA(m1G37)-methyltransferase TrmD
64	d2a7ya1	Alignment	not modelled	12.6	22	Fold: SH3-like barrel Superfamily: Cell growth inhibitor/plasmid maintenance toxic component Family: Rv2302-like
65	c2a7yA_	Alignment	not modelled	12.6	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein rv2302/mt2359; PDBTitle: solution structure of the conserved hypothetical protein2 rv2302 from the bacterium mycobacterium tuberculosis
66	d1vmka_	Alignment	not modelled	12.5	30	Fold: Phosphorylase/hydrolase-like Superfamily: Purine and uridine phosphorylases Family: Purine and uridine phosphorylases
67	c2akwB_	Alignment	not modelled	12.0	15	PDB header: ligase Chain: B: PDB Molecule: phenylalanyl-trna synthetase beta chain; PDBTitle: crystal structure of t.thermophilus phenylalanyl-trna synthetase2 complexed with p-cl-phenylalanine
68	c2pljA_	Alignment	not modelled	11.7	25	PDB header: lyase Chain: A: PDB Molecule: lysine/ornithine decarboxylase; PDBTitle: crystal structure of lysine/ornithine decarboxylase complexed with2 putrescine from vibrio vulnificus
69	c2k29A_	Alignment	not modelled	11.5	25	PDB header: transcription Chain: A: PDB Molecule: antitoxin relb; PDBTitle: structure of the dbd domain of e. coli antitoxin relb
70	d1ntga_	Alignment	not modelled	11.4	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Myf domain
71	d1pqwa_	Alignment	not modelled	11.3	31	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Alcohol dehydrogenase-like, C-terminal domain
72	c3n29A_	Alignment	not modelled	11.2	8	PDB header: lyase Chain: A: PDB Molecule: carboxynorspermidine decarboxylase; PDBTitle: crystal structure of carboxynorspermidine decarboxylase complexed with2 norspermidine from campylobacter jejuni
73	c3knuD_	Alignment	not modelled	11.2	33	PDB header: transferase Chain: D: PDB Molecule: trna (guanine-n(1))-methyltransferase; PDBTitle: crystal structure of trna (guanine-n1)-methyltransferase from2 anaplasma phagocytophilum
74	d1q2oa_	Alignment	not modelled	11.1	22	Fold: Phosphorylase/hydrolase-like Superfamily: Purine and uridine phosphorylases Family: Purine and uridine phosphorylases
75	c3upsA_	Alignment	not modelled	11.0	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: iojaP-like protein; PDBTitle: crystal structure of iojaP-like protein from zymomonas mobilis
76	c3quvB_	Alignment	not modelled	10.9	33	PDB header: transferase Chain: B: PDB Molecule: trna (guanine-n(1))-methyltransferase; PDBTitle: crystal structure of a trna-guanine-n1-methyltransferase from2 mycobacterium abscessus
77	c3khsB_	Alignment	not modelled	10.8	26	PDB header: hydrolase Chain: B: PDB Molecule: purine nucleoside phosphorylase; PDBTitle: crystal structure of grouper iridovirus purine nucleoside2 phosphorylase
78	d1v3va2	Alignment	not modelled	10.8	31	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Alcohol dehydrogenase-like, C-terminal domain
79	c2j66A_	Alignment	not modelled	10.7	45	PDB header: lyase Chain: A: PDB Molecule: btrk; PDBTitle: structural characterisation of btrk decarboxylase from2 butirosin biosynthesis
80	c3ky7A_	Alignment	not modelled	10.7	21	PDB header: transferase Chain: A: PDB Molecule: trna (guanine-n(1))-methyltransferase; PDBTitle: 2.35 angstrom resolution crystal structure of a putative trna2 (guanine-7-)-methyltransferase (trmd) from staphylococcus aureus3 subsp. aureus mrsa252
81	c3e6eC_	Alignment	not modelled	10.6	15	PDB header: isomerase Chain: C: PDB Molecule: alanine racemase; PDBTitle: crystal structure of alanine racemase from e.faecalis2 complex with cycloserine
82	d2fzwa2	Alignment	not modelled	10.6	15	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains

					Family: Alcohol dehydrogenase-like, C-terminal domain
83	d1p9pa_	Alignment	not modelled	10.5	33 Fold: alpha/beta knot Superfamily: alpha/beta knot Family: tRNA(m1G37)-methyltransferase TrmD
84	c1lttE_	Alignment	not modelled	10.4	22 PDB header: replication Chain: E: PDB Molecule: dna replication initiator (cdc21/cdc54); PDBTitle: the dodecamer structure of mcm from archaeal m.2 thermoautotrophicum
85	c2equA_	Alignment	not modelled	10.4	17 PDB header: protein binding Chain: A: PDB Molecule: phd finger protein 20-like 1; PDBTitle: solution structure of the tudor domain of phd finger2 protein 20-like 1
86	c1tufA_	Alignment	not modelled	10.4	8 PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure of diaminopimelate decarboxylase from m.2 jannaschi
87	c3iefA_	Alignment	not modelled	10.3	22 PDB header: transferase, rna binding protein Chain: A: PDB Molecule: trna (guanine-n(1)-)-methyltransferase; PDBTitle: crystal structure of trna guanine-n1-methyltransferase from2 bartonella henselae using mpcs.
88	c3ggsA_	Alignment	not modelled	10.2	22 PDB header: transferase Chain: A: PDB Molecule: purine nucleoside phosphorylase; PDBTitle: human purine nucleoside phosphorylase double mutant e201q,n243d2 complexed with 2-fluoro-2'-deoxyadenosine
89	c3mt1B_	Alignment	not modelled	10.2	8 PDB header: lyase Chain: B: PDB Molecule: putative carboxynorspermidine decarboxylase protein; PDBTitle: crystal structure of putative carboxynorspermidine decarboxylase2 protein from sinorhizobium meliloti
90	c2p4sA_	Alignment	not modelled	10.1	19 PDB header: transferase Chain: A: PDB Molecule: purine nucleoside phosphorylase; PDBTitle: structure of purine nucleoside phosphorylase from anopheles gambiae in2 complex with dadme-immh
91	d2fsqa1	Alignment	not modelled	10.0	6 Fold: LigT-like Superfamily: LigT-like Family: Atu0111-like
92	d2hd3a1	Alignment	not modelled	10.0	33 Fold: OB-fold Superfamily: EutN/CcmL-like Family: EutN/CcmL-like
93	d2qw7a1	Alignment	not modelled	9.9	24 Fold: OB-fold Superfamily: EutN/CcmL-like Family: EutN/CcmL-like
94	c3oo2A_	Alignment	not modelled	9.8	16 PDB header: isomerase Chain: A: PDB Molecule: alanine racemase 1; PDBTitle: 2.37 angstrom resolution crystal structure of an alanine racemase2 (alr) from staphylococcus aureus subsp. aureus col
95	d2soba_	Alignment	not modelled	9.7	9 Fold: OB-fold Superfamily: Staphylococcal nuclease Family: Staphylococcal nuclease
96	d1ltta_	Alignment	not modelled	9.6	21 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: DNA replication initiator (cdc21/cdc54) N-terminal domain
97	d2nn6h1	Alignment	not modelled	9.5	16 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
98	c2opkC_	Alignment	not modelled	9.4	27 PDB header: isomerase Chain: C: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a putative mannose-6-phosphate isomerase2 (reut_a1446) from ralstonia eutropha jmp134 at 2.10 a resolution
99	c2zkra_	Alignment	not modelled	9.4	25 PDB header: ribosomal protein/rna Chain: A: PDB Molecule: rna expansion segment es3; PDBTitle: structure of a mammalian ribosomal 60s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map