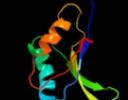
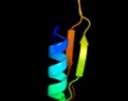
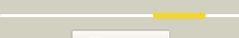
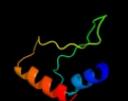
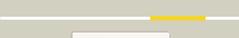
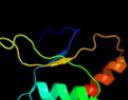
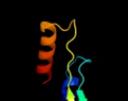
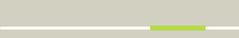


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P09549
Date	Thu Jan 5 11:02:24 GMT 2012
Unique Job ID	59e71f96d2c55d07

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1x60A_	 Alignment		99.7	19	PDB header: hydrolase Chain: A: PDB Molecule: sporulation-specific n-acetylmuramoyl-l-alanine PDBTitle: solution structure of the peptidoglycan binding domain of 2 b. subtilis cell wall lytic enzyme cwlc
2	d1utaa_	 Alignment		99.6	21	Fold: Ferredoxin-like Superfamily: Sporulation related repeat Family: Sporulation related repeat
3	d1wyua1	 Alignment		78.2	12	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Glycine dehydrogenase subunits (GDC-P)
4	d1dq3a4	 Alignment		77.6	14	Fold: Homing endonuclease-like Superfamily: Homing endonucleases Family: Intein endonuclease
5	d1m32a_	 Alignment		75.5	16	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
6	d1js3a_	 Alignment		71.7	8	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Pyridoxal-dependent decarboxylase
7	d1iuga_	 Alignment		71.0	12	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
8	c3k40B_	 Alignment		69.1	11	PDB header: lyase Chain: B: PDB Molecule: aromatic-l-amino-acid decarboxylase; PDBTitle: crystal structure of drosophila 3,4-dihydroxyphenylalanine2 decarboxylase
9	c2yrrA_	 Alignment		68.8	17	PDB header: transferase Chain: A: PDB Molecule: aminotransferase, class v; PDBTitle: hypothetical alanine aminotransferase (tth0173) from thermus2 thermophilus hb8
10	d1pmma_	 Alignment		68.4	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Pyridoxal-dependent decarboxylase
11	c3caiA_	 Alignment		67.8	13	PDB header: transferase Chain: A: PDB Molecule: possible aminotransferase; PDBTitle: crystal structure of mycobacterium tuberculosis rv3778c2 protein

12	c3f0hA_	Alignment		65.2	12	PDB header: transferase Chain: A: PDB Molecule: aminotransferase; PDBTitle: crystal structure of aminotransferase (rer070207000802) from2 eubacterium rectale at 1.70 a resolution
13	c3ffrA_	Alignment		65.1	21	PDB header: transferase Chain: A: PDB Molecule: phosphoserine aminotransferase serc; PDBTitle: crystal structure of a phosphoserine aminotransferase serc (chu_0995)2 from cytophaga hutchinsonii atcc 33406 at 1.75 a resolution
14	d1bs0a_	Alignment		62.6	20	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
15	c2fyfB_	Alignment		60.0	13	PDB header: transferase Chain: B: PDB Molecule: phosphoserine aminotransferase; PDBTitle: structure of a putative phosphoserine aminotransferase from2 mycobacterium tuberculosis
16	c2zxeG_	Alignment		59.1	48	PDB header: hydrolase/transport protein Chain: G: PDB Molecule: phospholemman-like protein; PDBTitle: crystal structure of the sodium - potassium pump in the e2.2k+ .pi2 state
17	c2qmaB_	Alignment		57.5	8	PDB header: transferase Chain: B: PDB Molecule: diaminobutyrate-pyruvate transaminase and l-2,4- PDBTitle: crystal structure of glutamate decarboxylase domain of2 diaminobutyrate-pyruvate transaminase and l-2,4-diaminobutyrate3 decarboxylase from vibrio parahaemolyticus
18	d1m6sa_	Alignment		56.5	18	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
19	c2dr1A_	Alignment		52.0	14	PDB header: transferase Chain: A: PDB Molecule: 386aa long hypothetical serine aminotransferase; PDBTitle: crystal structure of the ph1308 protein from pyrococcus horikoshii ot3
20	c3cq6E_	Alignment		51.5	11	PDB header: transferase Chain: E: PDB Molecule: histidinol-phosphate aminotransferase; PDBTitle: histidinol-phosphate aminotransferase from corynebacterium2 glutamicum holo-form (plp covalently bound)
21	d1fg7a_	Alignment	not modelled	49.5	16	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
22	c2jp3A_	Alignment	not modelled	49.5	26	PDB header: transcription Chain: A: PDB Molecule: fyxd domain-containing ion transport regulator 4; PDBTitle: solution structure of the human fxyd4 (chif) protein in sds2 micelles
23	d2ivda2	Alignment	not modelled	48.3	17	Fold: FAD-linked reductases, C-terminal domain Superfamily: FAD-linked reductases, C-terminal domain Family: L-aminoacid/polyamine oxidase
24	c2kncB_	Alignment	not modelled	48.2	32	PDB header: cell adhesion Chain: B: PDB Molecule: integrin beta-3; PDBTitle: platelet integrin alfaiib-beta3 transmembrane-cytoplasmic2 heterocomplex
25	c3hdoB_	Alignment	not modelled	46.8	20	PDB header: transferase Chain: B: PDB Molecule: histidinol-phosphate aminotransferase; PDBTitle: crystal structure of a histidinol-phosphate aminotransferase from2 geobacter metallireducens
26	d1qz9a_	Alignment	not modelled	46.4	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
27	c3hbxB_	Alignment	not modelled	46.1	21	PDB header: lyase Chain: B: PDB Molecule: glutamate decarboxylase 1; PDBTitle: crystal structure of gad1 from arabidopsis thaliana
28	d1elua_	Alignment	not modelled	45.0	16	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like PDB header: cell adhesion

29	c2rmzA	Alignment	not modelled	43.2	32	Chain: A: PDB Molecule: integrin beta-3; PDBTitle: bicelle-embedded integrin beta3 transmembrane segment
30	dlv72a1	Alignment	not modelled	43.1	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
31	d1t3ia	Alignment	not modelled	42.8	9	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
32	dljf9a	Alignment	not modelled	41.4	11	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
33	c2jo1A	Alignment	not modelled	40.3	13	PDB header: hydrolase regulator Chain: A: PDB Molecule: phospholemman; PDBTitle: structure of the na,k-atpase regulatory protein fxyd1 in2 micelles
34	dlseza2	Alignment	not modelled	39.8	26	Fold: FAD-linked reductases, C-terminal domain Superfamily: FAD-linked reductases, C-terminal domain Family: L-aminoacid/polyamine oxidase
35	dl0j4a2	Alignment	not modelled	39.2	14	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: 4-(cytidine 5'-diphospho)-2C-methyl-D-erythritol kinase IspE
36	c3ly1C	Alignment	not modelled	38.8	14	PDB header: transferase Chain: C: PDB Molecule: putative histidinol-phosphate aminotransferase; PDBTitle: crystal structure of putative histidinol-phosphate aminotransferase2 (yp_050345.1) from erwinia carotovora atroseptica scri1043 at 1.80 a3 resolution
37	d2erra1	Alignment	not modelled	38.4	7	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
38	c3getA	Alignment	not modelled	37.9	14	PDB header: transferase Chain: A: PDB Molecule: histidinol-phosphate aminotransferase; PDBTitle: crystal structure of putative histidinol-phosphate aminotransferase2 (np_281508.1) from campylobacter jejuni at 2.01 a resolution
39	c3f9tB	Alignment	not modelled	36.9	29	PDB header: lyase Chain: B: PDB Molecule: l-tyrosine decarboxylase mfna; PDBTitle: crystal structure of l-tyrosine decarboxylase mfna (ec 4.1.1.25)2 (np_247014.1) from methanococcus jannaschii at 2.11 a resolution
40	dlztpa1	Alignment	not modelled	35.7	8	Fold: eIF4e-like Superfamily: eIF4e-like Family: BLE503-like
41	c3a2bA	Alignment	not modelled	35.6	14	PDB header: transferase Chain: A: PDB Molecule: serine palmitoyltransferase; PDBTitle: crystal structure of serine palmitoyltransferase from sphingobacterium2 multivorum with substrate l-serine
42	c2okkA	Alignment	not modelled	35.2	13	PDB header: lyase Chain: A: PDB Molecule: glutamate decarboxylase 2; PDBTitle: the x-ray crystal structure of the 65kda isoform of glutamic acid2 decarboxylase (gad65)
43	d2bwna1	Alignment	not modelled	34.9	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
44	c2huuA	Alignment	not modelled	33.6	15	PDB header: transferase Chain: A: PDB Molecule: alanine glyoxylate aminotransferase; PDBTitle: crystal structure of aedes aegypti alanine glyoxylate2 aminotransferase in complex with alanine
45	dlleg5a	Alignment	not modelled	33.5	15	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
46	dlnxia	Alignment	not modelled	33.2	13	Fold: Ferredoxin-like Superfamily: Hypothetical protein VC0424 Family: Hypothetical protein VC0424
47	c2o01D	Alignment	not modelled	32.7	13	PDB header: photosynthesis Chain: D: PDB Molecule: photosystem i reaction center subunit ii; PDBTitle: the structure of a plant photosystem i supercomplex at 3.42 angstrom resolution
48	c3hqtB	Alignment	not modelled	32.4	12	PDB header: transferase Chain: B: PDB Molecule: cai-1 autoinducer synthase; PDBTitle: plp-dependent acyl-coa transferase cqsa
49	d3erja1	Alignment	not modelled	30.6	26	Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
50	dlx4ea1	Alignment	not modelled	30.6	20	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
51	d2gova1	Alignment	not modelled	30.1	7	Fold: Probable bacterial effector-binding domain Superfamily: Probable bacterial effector-binding domain Family: SOUL heme-binding protein
52	c2w8wA	Alignment	not modelled	30.1	15	PDB header: transferase Chain: A: PDB Molecule: serine palmitoyltransferase; PDBTitle: n100y spt with plp-ser
53	c2k8eA	Alignment	not modelled	29.4	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0339 protein yegp; PDBTitle: solution nmr structure of protein of unknown function yegp from e.2 coli. ontario center for structural proteomics target ec0640_1_1233 northeast structural genomics consortium target et102.
54	c2jieA	Alignment	not modelled	28.9	15	PDB header: lyase Chain: A: PDB Molecule: cysteine sulfinic acid decarboxylase;

54	c2j5a	Alignment	not modelled	28.9	10	PDBTitle: human cysteine sulfinic acid decarboxylase (csad) in2 complex with plp. PDB header: rna binding protein Chain: A: PDB Molecule: heterogeneous nuclear ribonucleoprotein m;
55	c2dh9A	Alignment	not modelled	27.6	12	PDBTitle: solution structure of the c-terminal rna binding domain in2 heterogeneous nuclear ribonucleoprotein m
56	d2f8ja1	Alignment	not modelled	26.4	21	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
57	d1h0ca	Alignment	not modelled	26.1	19	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
58	c1xtyD	Alignment	not modelled	25.8	19	PDB header: hydrolase Chain: D: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: crystal structure of sulfolobus solfataricus peptidyl-trna2 hydrolase
59	c3r8kB	Alignment	not modelled	25.5	12	PDB header: apoptosis Chain: B: PDB Molecule: heme-binding protein 2; PDBTitle: crystal structure of human soul protein (hexagonal form)
60	d1rk8a	Alignment	not modelled	25.3	9	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
61	d2cpia1	Alignment	not modelled	23.7	4	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
62	c2hzpA	Alignment	not modelled	23.1	11	PDB header: hydrolase Chain: A: PDB Molecule: kynureninase; PDBTitle: crystal structure of homo sapiens kynureninase
63	c3p3dA	Alignment	not modelled	22.8	19	PDB header: nuclear protein Chain: A: PDB Molecule: nucleoporin 53; PDBTitle: crystal structure of the nup53 rrm domain from pichia guilliermondii
64	c3bpqD	Alignment	not modelled	22.4	31	PDB header: toxin Chain: D: PDB Molecule: toxin rele3; PDBTitle: crystal structure of relb-rele antitoxin-toxin complex from2 methanococcus jannaschii
65	c2zv3E	Alignment	not modelled	22.1	23	PDB header: hydrolase Chain: E: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: crystal structure of project mj0051 from methanocaldococcus2 jannaschii dsm 2661
66	c2d3kA	Alignment	not modelled	21.9	17	PDB header: hydrolase Chain: A: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: structural study on project id ph1539 from pyrococcus2 horikoshii ot3
67	c2eqkA	Alignment	not modelled	21.9	10	PDB header: transcription Chain: A: PDB Molecule: tudor domain-containing protein 4; PDBTitle: solution structure of the tudor domain of tudor domain-2 containing protein 4
68	d1mdoa	Alignment	not modelled	21.9	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
69	c3eucB	Alignment	not modelled	21.8	8	PDB header: transferase Chain: B: PDB Molecule: histidinol-phosphate aminotransferase 2; PDBTitle: crystal structure of histidinol-phosphate aminotransferase2 (yp_297314.1) from ralstonia eutropha jmp134 at 2.05 a resolution
70	d2c0ra1	Alignment	not modelled	20.2	7	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
71	c2z0rA	Alignment	not modelled	19.7	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative uncharacterized protein ttha0547; PDBTitle: crystal structure of hypothetical protein ttha0547
72	d1rlka	Alignment	not modelled	19.4	28	Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
73	c2q5cA	Alignment	not modelled	18.7	17	PDB header: transcription Chain: A: PDB Molecule: ntrc family transcriptional regulator; PDBTitle: crystal structure of ntrc family transcriptional regulator from2 clostridium acetobutylicum
74	c2k49A	Alignment	not modelled	18.7	4	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0339 protein so_3888; PDBTitle: solution nmr structure of upf0339 protein so3888 from shewanella2 oneidensis. northeast structural genomics consortium target sor190
75	c3ns5B	Alignment	not modelled	18.6	18	PDB header: translation Chain: B: PDB Molecule: eukaryotic translation initiation factor 3 subunit b; PDBTitle: crystal structure of the rna recognition motif of yeast eif3b residues2 76-161
76	c3hdeA	Alignment	not modelled	18.2	14	PDB header: hydrolase Chain: A: PDB Molecule: lysozyme; PDBTitle: crystal structure of full-length endolysin r21 from page 21
77	d1wi6a1	Alignment	not modelled	18.1	12	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
78	c1no8A	Alignment	not modelled	17.8	11	PDB header: rna binding protein Chain: A: PDB Molecule: aly; PDBTitle: solution structure of the nuclear factor aly rbd domain
79	d1no8a	Alignment	not modelled	17.8	11	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD

80	c2wseD_	Alignment	not modelled	17.4	13	PDB header: photosynthesis Chain: D: PDB Molecule: photosystem i reaction center subunit ii, PDBTitle: improved model of plant photosystem i
81	c2jwaA_	Alignment	not modelled	17.4	25	PDB header: transferase Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-2; PDBTitle: erbb2 transmembrane segment dimer spatial structure
82	c2pbiA_	Alignment	not modelled	17.3	9	PDB header: signaling protein Chain: A: PDB Molecule: regulator of g-protein signaling 9; PDBTitle: the multifunctional nature of gbeta5/rgs9 revealed from its crystal2 structure
83	c3ml6D_	Alignment	not modelled	16.8	12	PDB header: protein transport Chain: D: PDB Molecule: chimeric complex between protein dishevelled2 homolog dvl-2 PDBTitle: a complex between dishevelled2 and clathrin adaptor ap-2
84	d1gccA_	Alignment	not modelled	16.2	6	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: GCC-box binding domain
85	c2divA_	Alignment	not modelled	16.0	10	PDB header: rna binding protein Chain: A: PDB Molecule: trna selenocysteine associated protein; PDBTitle: solution structure of the rrm domain of trna selenocysteine2 associated protein
86	c3ht4B_	Alignment	not modelled	16.0	15	PDB header: lyase Chain: B: PDB Molecule: aluminum resistance protein; PDBTitle: crystal structure of the q81a77_baccr protein from bacillus2 cereus. northeast structural genomics consortium target3 bcr213
87	d1wglA_	Alignment	not modelled	15.9	8	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
88	d1q7sa_	Alignment	not modelled	15.7	19	Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
89	c3ffhA_	Alignment	not modelled	15.6	20	PDB header: transferase Chain: A: PDB Molecule: histidinol-phosphate aminotransferase; PDBTitle: the crystal structure of histidinol-phosphate aminotransferase from2 listeria innocua clip11262.
90	d1jb0d_	Alignment	not modelled	15.0	10	Fold: Photosystem I subunit PsaD Superfamily: Photosystem I subunit PsaD Family: Photosystem I subunit PsaD
91	c2ordA_	Alignment	not modelled	15.0	13	PDB header: transferase Chain: A: PDB Molecule: acetylornithine aminotransferase; PDBTitle: crystal structure of acetylornithine aminotransferase (ec 2.6.1.11)2 (acoat) (tm1785) from thermotoga maritima at 1.40 a resolution
92	c3n23E_	Alignment	not modelled	14.6	24	PDB header: hydrolase Chain: E: PDB Molecule: na+/k+ atpase gamma subunit transcript variant a; PDBTitle: crystal structure of the high affinity complex between ouabain and the2 e2p form of the sodium-potassium pump
93	d2cqha1	Alignment	not modelled	14.6	15	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
94	d2ch1a1	Alignment	not modelled	14.4	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: Cystathionine synthase-like
95	d2cpea1	Alignment	not modelled	13.8	8	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
96	c2i9vA_	Alignment	not modelled	13.8	14	PDB header: rna binding protein Chain: A: PDB Molecule: pre-mrna-processing factor 40 homolog a; PDBTitle: nmr structure of the ff domain l24a mutant's folding transition state
97	d2cpha1	Alignment	not modelled	13.8	19	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
98	c3e9kA_	Alignment	not modelled	13.7	11	PDB header: hydrolase Chain: A: PDB Molecule: kynureninase; PDBTitle: crystal structure of homo sapiens kynureninase-3-hydroxyhippuric acid2 inhibitor complex
99	d1fxla1	Alignment	not modelled	13.6	9	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD