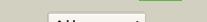
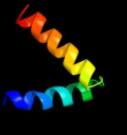
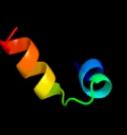
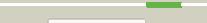
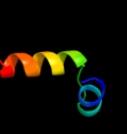
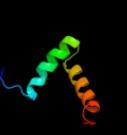
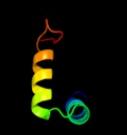
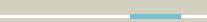


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P03961
Date	Thu Jan 5 10:58:08 GMT 2012
Unique Job ID	ed15e527d872e846

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1hq1a_			56.0	17	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
2	c3ipwA_			54.7	8	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase tadt family protein; PDBTitle: crystal structure of hydrolase tadt family protein from entamoeba2 histolytica
3	d1dula_			54.5	18	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
4	d1qb2a_			53.8	29	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
5	c2jqeA_			52.2	25	PDB header: signaling protein Chain: A: PDB Molecule: signal recognition 54 kda protein; PDBTitle: soution structure of af54 m-domain
6	d2ffha2			49.4	25	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
7	c3rcmA_			47.0	13	PDB header: hydrolase Chain: A: PDB Molecule: tadt family hydrolase; PDBTitle: crystal structure of efi target 500140:tadt family hydrolase from2 pseudomonas putida
8	d1qzx2			46.0	32	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
9	c3e2vA_			45.3	17	PDB header: hydrolase Chain: A: PDB Molecule: 3'-5'-exonuclease; PDBTitle: crystal structure of an uncharacterized amidohydrolase from2 saccharomyces cerevisiae
10	c3gg7A_			42.2	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized metalloprotein; PDBTitle: crystal structure of an uncharacterized metalloprotein from2 deinococcus radiodurans
11	d1j6oa_			35.0	3	Fold: TIM beta/alpha-barrel Superfamily: Metallo-dependent hydrolases Family: TatD Mg-dependent DNase-like

12	d1xwyal			33.9	13	Fold: TIM beta/alpha-barrel Superfamily: Metallo-dependent hydrolases Family: TatD Mg-dependent DNase-like
13	c2xioA_			27.1	8	PDB header: hydrolase Chain: A: PDB Molecule: putative deoxyribonuclease tatdn1; PDBTitle: structure of putative deoxyribonuclease tatdn1 isoform a
14	d1zoda1			26.2	19	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
15	c3qlIB_			26.2	5	PDB header: lyase Chain: B: PDB Molecule: citrate lyase; PDBTitle: crystal structure of r ipc from yersinia pestis
16	d1zzma1			25.4	10	Fold: TIM beta/alpha-barrel Superfamily: Metallo-dependent hydrolases Family: TatD Mg-dependent DNase-like
17	c2y1hA_			24.7	18	PDB header: hydrolase Chain: A: PDB Molecule: putative deoxyribonuclease tatdn3; PDBTitle: crystal structure of the human tatd-domain protein 3 (tatdn3)
18	d2fp7b1			23.6	33	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral proteases
19	c2gzb_			22.8	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative tatd related dnase; PDBTitle: crystal structure of the tatd deoxyribonuclease mw0446 from2 staphylococcus aureus. northeast structural genomics consortium3 target zr237.
20	c1toaA_			22.1	8	PDB header: binding protein Chain: A: PDB Molecule: protein (periplasmic binding protein troa); PDBTitle: periplasmic zinc binding protein troa from treponema pallidum
21	d1toaa_		not modelled	22.1	8	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: TroA-like
22	c3dxxvA_		not modelled	22.1	25	PDB header: isomerase Chain: A: PDB Molecule: alpha-amino-epsilon-caprolactam racemase; PDBTitle: the crystal structure of alpha-amino-epsilon-caprolactam racemase from2 achromobacter obae
23	c2ordA_		not modelled	22.0	24	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
24	c1z7dE_		not modelled	21.9	17	PDB header: transferase Chain: E: PDB Molecule: ornithine aminotransferase; PDBTitle: ornithine aminotransferase py00104 from plasmodium yoelii
25	d2ijob1		not modelled	21.8	39	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral proteases
26	c2fvmA_		not modelled	21.7	13	PDB header: hydrolase Chain: A: PDB Molecule: dihydropyrimidinase; PDBTitle: crystal structure of dihydropyrimidinase from saccharomyces kluyveri2 in complex with the reaction product n-carbamyl-beta-alanine
27	c3e90B_		not modelled	21.2	39	PDB header: hydrolase Chain: B: PDB Molecule: ns3 protease; PDBTitle: west nile vi rus ns2b-ns3protease in complexed with inhibitor naph-kkr-h
						PDB header: transferase Chain: B: PDB Molecule: acetylornithine/succinyl diamino pimelate

28	c2pb2B	Alignment	not modelled	20.7	16	aminotransferase; PDBTitle: structure of biosynthetic n-acetylornithine aminotransferase from <i>salmonella typhimurium</i> : studies on substrate specificity and inhibitor binding
29	c2j37W	Alignment	not modelled	20.4	29	PDB header: ribosome Chain: W: PDB Molecule: signal recognition particle 54 kda protein PDBTitle: model of mammalian srp bound to 80s rncs
30	c2v3cC	Alignment	not modelled	20.0	17	PDB header: signaling protein Chain: C: PDB Molecule: signal recognition 54 kda protein; PDBTitle: crystal structure of the srp54-srp19-7s s rrp rna complex2 of <i>m. jannaschii</i>
31	c2ps3A	Alignment	not modelled	19.5	13	PDB header: metal transport Chain: A: PDB Molecule: high-affinity zinc uptake system protein znu; PDBTitle: structure and metal binding properties of znu, a2 periplasmic zinc transporter from <i>escherichia coli</i>
32	d1befa	Alignment	not modelled	19.2	33	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral proteases
33	c3lkwa	Alignment	not modelled	18.8	28	PDB header: viral protein,hydrolase Chain: A: PDB Molecule: fusion protein of nonstructural protein 2b and PDBTitle: crystal structure of dengue virus 1 ns2b/ns3 protease active2 site mutant
34	c3dm5A	Alignment	not modelled	18.1	29	PDB header: rna binding protein, transport protein Chain: A: PDB Molecule: signal recognition 54 kda protein; PDBTitle: structures of srp54 and srp19, the two proteins assembling2 the ribonucleic core of the signal recognition particle3 from the archaeon <i>pyrococcus furius</i> .
35	c3mfqb	Alignment	not modelled	17.9	5	PDB header: metal binding protein Chain: B: PDB Molecule: high-affinity zinc uptake system protein znu; PDBTitle: a glance into the metal binding specificity of troa: where elaborate2 behaviors occur in the active center
36	d2byla1	Alignment	not modelled	17.7	16	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
37	d2fomb1	Alignment	not modelled	17.6	33	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral proteases
38	c2iy3A	Alignment	not modelled	17.3	25	PDB header: rna-binding Chain: A: PDB Molecule: signal recognition particle protein ffh; PDBTitle: structure of the <i>e. coli</i> signal recognition particle2 bound to a translating ribosome
39	d1ohwa	Alignment	not modelled	17.1	15	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
40	d2phcb1	Alignment	not modelled	16.2	29	Fold: Cyclophilin-like Superfamily: Cyclophilin-like Family: PH0987 C-terminal domain-like
41	c1oatB	Alignment	not modelled	15.7	15	PDB header: aminotransferase Chain: B: PDB Molecule: ornithine aminotransferase; PDBTitle: ornithine aminotransferase
42	c3n5mD	Alignment	not modelled	15.4	14	PDB header: transferase Chain: D: PDB Molecule: adenosylmethionine-8-amino-7-oxononanoate aminotransferase; PDBTitle: crystals structure of a <i>bacillus anthracis</i> aminotransferase
43	d1sffa	Alignment	not modelled	15.4	13	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
44	c3fcra	Alignment	not modelled	15.1	26	PDB header: transferase Chain: A: PDB Molecule: putative aminotransferase; PDBTitle: crystal structure of putative aminotransferase (yp_614685.1) from <i>silicibacter sp. tm1040</i> at 1.80 a resolution
45	d1vkoal	Alignment	not modelled	14.9	24	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
46	c1qzwC	Alignment	not modelled	14.6	29	PDB header: signaling protein/rna Chain: C: PDB Molecule: signal recognition 54 kda protein; PDBTitle: crystal structure of the complete core of archaeal srp and2 implications for inter-domain communication
47	c3i4jc	Alignment	not modelled	14.6	17	PDB header: transferase Chain: C: PDB Molecule: aminotransferase, class iii; PDBTitle: crystal structure of aminotransferase, class iii from <i>deinococcus radiodurans</i>
48	d2pv4a1	Alignment	not modelled	14.5	29	Fold: Sama2622-like Superfamily: Sama2622-like Family: Sama2622-like
49	c2j289	Alignment	not modelled	14.2	18	PDB header: ribosome Chain: 9: PDB Molecule: signal recognition particle 54; PDBTitle: model of <i>e. coli</i> srp bound to 70s rncs
50	d1yixa1	Alignment	not modelled	13.6	19	Fold: TIM beta/alpha-barrel Superfamily: Metallo-dependent hydrolases Family: TatD Mg-dependent DNase-like
51	c2zp2B	Alignment	not modelled	13.1	25	PDB header: transferase inhibitor Chain: B: PDB Molecule: kinase a inhibitor; PDBTitle: c-terminal domain of kipi from <i>bacillus subtilis</i>
52	d1s0aa	Alignment	not modelled	13.1	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
						PDB header: high density lipoproteins Chain: A: PDB Molecule: lipoprotein

53	c1gw4A	Alignment	not modelled	12.6	35	Chain: A: PDB Molecule: apo-a-1; PDBTitle: the helix-hinge-helix structural motif in human2 apolipoprotein a-1 determined by nmr spectroscopy, 13 structure PDB header: cell adhesion, transport protein Chain: B: PDB Molecule: lmb; PDBTitle: structure of laminin binding protein (lmb) of streptococcus2 agalactiae a bifunctional protein with adhesin and metal3 transporting activity PDB header: transferase Chain: B: PDB Molecule: 4-aminobutyrate transaminase; PDBTitle: crystal structure of 4-aminobutyrate transaminase from mycobacterium2 smegmatis PDB header: isomerase Chain: A: PDB Molecule: glutamate-1-semialdehyde 2,1-aminotransferase 1; PDBTitle: crystal structure of bacillus anthracis heml-1, glutamate semialdehyde2 aminotransferase
54	c3hjtB	Alignment	not modelled	11.6	21	PDB header: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
55	c3oksB	Alignment	not modelled	11.5	13	PDB header: transferase Chain: B: PDB Molecule: 4-aminobutyrate transaminase; PDBTitle: crystal structure of 4-aminobutyrate transaminase from mycobacterium2 smegmatis PDB header: isomerase Chain: A: PDB Molecule: glutamate-1-semialdehyde 2,1-aminotransferase 1; PDBTitle: crystal structure of bacillus anthracis heml-1, glutamate semialdehyde2 aminotransferase
56	c3l44A	Alignment	not modelled	11.5	15	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
57	d1z7da1	Alignment	not modelled	11.4	17	PDB header: transferase Chain: A: PDB Molecule: adenosylmethionine-8-amino-7-oxononanoate aminotransferase; PDBTitle: crystal structure of plp bound 7,8-diaminopelargonic acid synthase in2 bacillus subtilis
58	c3dodA	Alignment	not modelled	11.2	20	PDB header: transferase Chain: A: PDB Molecule: pyruvate transaminase; PDBTitle: crystal structure of omega-transferase from vibrio fluvialis js17
59	c3nuiA	Alignment	not modelled	11.0	11	PDB header: transferase Chain: A: PDB Molecule: acetylornithine aminotransferase; PDBTitle: crystal structure of acetylornithine aminotransferase from aquifex2 aeolicus vf5
60	c2eh6A	Alignment	not modelled	10.6	17	Fold: Thiolase-like Superfamily: Thiolase-like Family: Thiolase-related
61	d1afwa2	Alignment	not modelled	10.1	30	Fold: TIM beta/alpha-barrel Superfamily: Malate synthase G Family: Malate synthase G
62	d1d8ca	Alignment	not modelled	10.1	36	PDB header: hydrolase Chain: B: PDB Molecule: uv excision repair protein rad23; PDBTitle: structure of a peptide:n-glycanase-rad23 complex
63	c1x3wB	Alignment	not modelled	9.9	19	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase 2; PDBTitle: crystal structure of thermotoga maritima nondiscriminating glutamyl-2 tRNA synthetase in complex with a glutamyl-amp analog
64	d1e5pa	Alignment	not modelled	9.8	25	Fold: Lipocalins Superfamily: Lipocalins Family: Retinol binding protein-like
65	c3ruyB	Alignment	not modelled	9.8	8	PDB header: transferase Chain: B: PDB Molecule: ornithine aminotransferase; PDBTitle: crystal structure of the ornithine-oxo acid transaminase rocd from2 bacillus anthracis
66	c3afhA	Alignment	not modelled	9.8	17	PDB header: transcription Chain: A: PDB Molecule: arabinose operon regulatory protein; PDBTitle: solution structure of dna binding domain of e. coli arac
67	d1ldma1	Alignment	not modelled	9.7	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: C-terminal fragment of elongation factor SelB
68	c2k9sA	Alignment	not modelled	9.4	27	PDB header: structural protein Chain: A: PDB Molecule: sperm flagellar protein 1; PDBTitle: solution structure of the ch domain from human sperm2 flagellar protein 1
69	d2v9va2	Alignment	not modelled	9.2	13	Fold: Subtilisin-like Superfamily: Subtilisin-like Family: Subtilases
70	c2ee7A	Alignment	not modelled	9.1	14	PDB header: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
71	d1gnsa	Alignment	not modelled	9.1	17	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
72	d1i0za1	Alignment	not modelled	8.9	24	PDB header: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Plant O-methyltransferase, N-terminal domain
73	d1tw3a1	Alignment	not modelled	8.9	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
74	d1p1ja1	Alignment	not modelled	8.7	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein mk0293; PDBTitle: crystal structure of protein mk0293 from methanopyrus kandleri av19
75	c3c19A	Alignment	not modelled	8.5	0	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
76	d2a1ja1	Alignment	not modelled	8.5	13	PDB header: lyase Chain: A: PDB Molecule: cite; PDBTitle: structure of cite complexed with triphosphate group of atp2 form mycobacterium tuberculosis
77	c1u5vA	Alignment	not modelled	8.4	13	PDB header: transport protein Chain: A: PDB Molecule: periplasmic binding protein component of an abc PDBTitle: crystal structure of 138-173 znu deletion mutant plus
78	c2ov3A	Alignment	not modelled	8.1	25	

79	c2kg5A	Alignment	not modelled	8.0	14	zinc2 bound PDB header: unknown function Chain: A: PDB Molecule: avirulence protein; PDBTitle: solution nmr structure of a section of the repeat domain of the type2 iii effector protein ptha
80	d1psza	Alignment	not modelled	7.9	14	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: TraA-like
81	c2xstA	Alignment	not modelled	7.7	15	PDB header: transport protein Chain: A: PDB Molecule: lipocalin 15; PDBTitle: crystal structure of the human lipocalin 15
82	c3rggD	Alignment	not modelled	7.5	9	PDB header: lyase Chain: D: PDB Molecule: phosphoribosylaminoimidazole carboxylase, pure protein; PDBTitle: crystal structure of treponema denticola pure bound to air
83	d1b8za	Alignment	not modelled	7.5	24	Fold: IHF-like DNA-binding proteins Superfamily: IHF-like DNA-binding proteins Family: Prokaryotic DNA-bending protein
84	d1oqya3	Alignment	not modelled	7.4	23	Fold: XPC-binding domain Superfamily: XPC-binding domain Family: XPC-binding domain
85	d1z67a1	Alignment	not modelled	7.4	9	Fold: YidB-like Superfamily: YidB-like Family: YidB-like
86	c3ls1A	Alignment	not modelled	7.3	26	PDB header: photosynthesis Chain: A: PDB Molecule: sl11638 protein; PDBTitle: crystal structure of cyanobacterial psbq from synechocystis2 sp. pcc 6803 complexed with zn2+
87	c2zc1A	Alignment	not modelled	7.3	18	PDB header: hydrolase Chain: A: PDB Molecule: phosphotriesterase; PDBTitle: organophosphorus hydrolase from deinococcus radiodurans
88	c2fw9A	Alignment	not modelled	7.2	22	PDB header: lyase Chain: A: PDB Molecule: n5-carboxyaminoimidazole ribonucleotide mutase; PDBTitle: structure of pure (n5-carboxyaminoimidazole ribonucleotide mutase)2 h59f from the acidophilic bacterium acetobacter aceti, at ph 8
89	c2huoA	Alignment	not modelled	7.2	11	PDB header: oxidoreductase Chain: A: PDB Molecule: inositol oxygenase; PDBTitle: crystal structure of mouse myo-inositol oxygenase in complex with2 substrate
90	d3bxda1	Alignment	not modelled	7.2	11	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: MioX-like
91	d1pq4a	Alignment	not modelled	7.1	25	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: TraA-like
92	d1znnda1	Alignment	not modelled	7.1	4	Fold: Lipocalins Superfamily: Lipocalins Family: Retinol binding protein-like
93	d1ulla	Alignment	not modelled	7.1	22	Fold: Flavodoxin-like Superfamily: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE) Family: N5-CAIR mutase (phosphoribosylaminoimidazole carboxylase, PurE)
94	d1hdgo2	Alignment	not modelled	7.1	19	Fold: fwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: GAPDH-like
95	d1x68a2	Alignment	not modelled	7.0	50	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
96	c1xv1C	Alignment	not modelled	7.0	14	PDB header: metal transport Chain: C: PDB Molecule: mn transporter; PDBTitle: the three-dimensional structure of mntc from synechocystis2 6803
97	c3hmuA	Alignment	not modelled	6.8	17	PDB header: transferase Chain: A: PDB Molecule: aminotransferase, class iii; PDBTitle: crystal structure of a class iii aminotransferase from2 silicibacter pomeroyi
98	c1w1nA	Alignment	not modelled	6.7	24	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol 3-kinase tor1; PDBTitle: the solution structure of the fatc domain of the protein2 kinase tor1 from yeast
99	c2e7uA	Alignment	not modelled	6.7	14	PDB header: isomerase Chain: A: PDB Molecule: glutamate-1-semialdehyde 2,1-aminomutase; PDBTitle: crystal structure of glutamate-1-semialdehyde 2,1-aminomutase from2 thermus thermophilus hb8