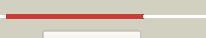
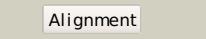
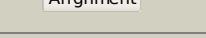
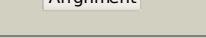
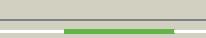


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P21437
Date	Thu Jan 5 11:38:20 GMT 2012
Unique Job ID	eaf29ada377af7bc

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1ni9a_	Alignment		100.0	56	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: GlpX-like bacterial fructose-1,6-bisphosphatase
2	c3luza_	Alignment		97.6	15	PDB header: hydrolase Chain: A: PDB Molecule: extragenic suppressor protein suhb; PDBTitle: crystal structure of extragenic suppressor protein suhb from2 bartonella henselae, via combined iodide sad molecular replacement
3	c2qflA_	Alignment		96.9	19	PDB header: hydrolase Chain: A: PDB Molecule: inositol-1-monophosphatase; PDBTitle: structure of suhb: inositol monophosphatase and extragenic2 suppressor from e. coli
4	d1lbva_	Alignment		96.8	21	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
5	c2czhB_	Alignment		96.8	25	PDB header: hydrolase Chain: B: PDB Molecule: inositol monophosphatase 2; PDBTitle: crystal structure of human myo-inositol monophosphatase 22 (imp2) with phosphate ion (orthorhombic form)
6	c2fvzB_	Alignment		96.7	25	PDB header: hydrolase Chain: B: PDB Molecule: inositol monophosphatase 2; PDBTitle: human inositol monophosphatase 2
7	c2p3nB_	Alignment		96.6	20	PDB header: hydrolase Chain: B: PDB Molecule: inositol-1-monophosphatase; PDBTitle: thermotoga maritima impase tm1415
8	d1g0ha_	Alignment		96.6	17	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
9	c2pcra_	Alignment		96.4	27	PDB header: hydrolase Chain: A: PDB Molecule: inositol-1-monophosphatase; PDBTitle: crystal structure of myo-inositol-1(or 4)-monophosphatase (aq_1983)2 from aquifex aeolicus vf5
10	d1xi6a_	Alignment		96.3	18	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
11	c2q74B_	Alignment		96.3	18	PDB header: hydrolase Chain: B: PDB Molecule: inositol-1-monophosphatase; PDBTitle: mycobacterium tuberculosis suhb

12	d2hhma			95.6	19	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
13	c3b8bA			95.2	16	PDB header: hydrolase Chain: A: PDB Molecule: cysq, sulfite synthesis pathway protein; PDBTitle: crystal structure of cysq from bacteroides thetaiotaomicron, a2 bacterial member of the inositol monophosphatase family
14	d1vdwa			94.9	19	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
15	d1inpA			94.2	21	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
16	d1jp4a			94.1	18	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
17	d1d9qa			89.1	14	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
18	c3uksB			85.1	15	PDB header: hydrolase Chain: B: PDB Molecule: sedoheptulose-1,7 bisphosphatase, putative; PDBTitle: 1.85 angstrom crystal structure of putative sedoheptulose-1,72 bisphosphatase from toxoplasma gondii
19	d1kala			81.6	28	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
20	d1g6sa			81.3	16	Fold: IF3-like Superfamily: EPT/RTPC-like Family: Enolpyruvate transferase, EPT
21	d1j5ta		not modelled	75.7	11	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
22	c2yvkA		not modelled	67.6	25	PDB header: isomerase Chain: A: PDB Molecule: methylthioribose-1-phosphate isomerase; PDBTitle: crystal structure of 5-methylthioribose 1-phosphate2 isomerase product complex from bacillus subtilis
23	c3a11D		not modelled	60.7	20	PDB header: isomerase Chain: D: PDB Molecule: translation initiation factor eif-2b, delta PDBTitle: crystal structure of ribose-1,5-bisphosphate isomerase from thermococcus kodakaraensis kod1
24	d1cjca2		not modelled	59.6	14	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: N-terminal domain of adrenodoxin reductase-like
25	c3aerC		not modelled	57.7	19	PDB header: oxidoreductase Chain: C: PDB Molecule: light-independent protochlorophyllide reductase subunit n; PDBTitle: structure of the light-independent protochlorophyllide reductase2 catalyzing a key reduction for greening in the dark
26	c3j08A		not modelled	54.3	14	PDB header: hydrolase, metal transport Chain: A: PDB Molecule: copper-exporting p-type atpase a; PDBTitle: high resolution helical reconstruction of the bacterial p-type atpase2 copper transporter copa
27	d1t5oa		not modelled	53.9	19	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
28	d2aea1		not modelled	52.7	19	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)

29	c3ecsD	Alignment	not modelled	52.6	25	PDB header: translation Chain: D: PDB Molecule: translation initiation factor eif-2b subunit PDBTitle: crystal structure of human eif2b alpha
30	c3j09A	Alignment	not modelled	49.0	14	PDB header: hydrolase, metal transport Chain: A: PDB Molecule: copper-exporting p-type atpase a; PDBTitle: high resolution helical reconstruction of the bacterial p-type atpase2 copper transporter copa
31	d2a0ua1	Alignment	not modelled	47.6	15	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
32	d1spia	Alignment	not modelled	44.4	18	Fold: Carbohydrate phosphatase Superfamily: Carbohydrate phosphatase Family: Inositol monophosphatase/fructose-1,6-bisphosphatase-like
33	d1t9ka	Alignment	not modelled	44.1	18	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
34	c3n91A	Alignment	not modelled	43.7	29	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a structural genomics, unknown function2 (bacova_03430) from bacteroides ovatus at 2.40 a resolution
35	c3pajA	Alignment	not modelled	40.3	17	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase, carboxylating; PDBTitle: 2.00 angstrom resolution crystal structure of a quinolinate2 phosphoribosyltransferase from vibrio cholerae o1 biovar eltor str.3 n16961
36	c3rf7A	Alignment	not modelled	39.7	11	PDB header: oxidoreductase Chain: A: PDB Molecule: iron-containing alcohol dehydrogenase; PDBTitle: crystal structure of an iron-containing alcohol dehydrogenase2 (sden_2133) from shewanella denitrificans os-217 at 2.12 a resolution
37	c2kg4A	Alignment	not modelled	39.2	17	PDB header: cell cycle Chain: A: PDB Molecule: growth arrest and dna-damage-inducible protein PDBTitle: three-dimensional structure of human gadd45alpha in2 solution by nmr
38	d1vb5a	Alignment	not modelled	37.2	16	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
39	c3gwpA	Alignment	not modelled	36.4	21	PDB header: lyase Chain: A: PDB Molecule: carbon-sulfur lyase involved in aluminum resistance; PDBTitle: crystal structure of carbon-sulfur lyase involved in aluminum2 resistance (yp_878183.1) from clostridium novyi nt at 2.90 a3 resolution
40	c2xdqA	Alignment	not modelled	35.7	12	PDB header: oxidoreductase Chain: A: PDB Molecule: light-independent protochlorophyllide reductase subunit n; PDBTitle: dark operative protochlorophyllide oxidoreductase (chl-n-2 chl-b)2 complex
41	d1imb3	Alignment	not modelled	33.7	18	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
42	c3pdIB	Alignment	not modelled	33.0	14	PDB header: protein binding Chain: B: PDB Molecule: nitrogenase mofe cofactor biosynthesis protein nifm; PDBTitle: precursor bound nifen
43	d1u7pa	Alignment	not modelled	32.7	18	Fold: HAD-like Superfamily: HAD-like Family: Magnesium-dependent phosphatase-1, Mdp1
44	c2ejab	Alignment	not modelled	31.0	15	PDB header: lyase Chain: B: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from2 aquifex aeolicus
45	d1mlnb	Alignment	not modelled	30.5	15	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
46	c3roiA	Alignment	not modelled	30.3	16	PDB header: transferase Chain: A: PDB Molecule: 3-phosphoshikimate 1-carboxyvinyltransferase; PDBTitle: 2.20 angstrom resolution structure of 3-phosphoshikimate 1-2 carboxyvinyltransferase (aroa) from coxiella burnetii
47	d1i4na	Alignment	not modelled	29.8	10	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phosphate binding barrel Family: Tryptophan biosynthesis enzymes
48	c2k2wA	Alignment	not modelled	28.2	20	PDB header: cell cycle Chain: A: PDB Molecule: recombination and dna repair protein; PDBTitle: second brct domain of nbs1
49	c2ewtA	Alignment	not modelled	27.9	23	PDB header: dna binding protein Chain: A: PDB Molecule: putative dna-binding protein; PDBTitle: crystal structure of the dna-binding domain of bldd
50	d7reqa2	Alignment	not modelled	27.7	15	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
51	d1vlja	Alignment	not modelled	27.4	7	Fold: Dehydroquinate synthase-like Superfamily: Dehydroquinate synthase-like Family: Iron-containing alcohol dehydrogenase
52	c2decA	Alignment	not modelled	25.6	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: 325aa long hypothetical protein; PDBTitle: crystal structure of the pho510 protein from pyrococcus horikoshii ot3
						PDB header: oxidoreductase

53	c3bfjK	Alignment	not modelled	25.4	18	<p>Chain: K: PDB Molecule:1,3-propanediol oxidoreductase; PDBTitle: crystal structure analysis of 1,3-propanediol oxidoreductase</p> <p>PDB header:oxidoreductase</p>
54	c3ox4D	Alignment	not modelled	24.3	18	<p>Chain: D: PDB Molecule:alcohol dehydrogenase 2; PDBTitle: structures of iron-dependent alcohol dehydrogenase 2 from zymomonas2 mobilis zm4 complexed with nad cofactor</p> <p>PDB header:isomerase</p>
55	c1w2wj	Alignment	not modelled	23.4	17	<p>Chain: J: PDB Molecule:5-methylthioribose-1-phosphate isomerase; PDBTitle: crystal structure of yeast ypr118w, a methylthioribose-1-2 phosphate isomerase related to regulatory eif2b subunits</p> <p>PDB header:transferase</p>
56	c3e59A	Alignment	not modelled	23.4	22	<p>Chain: A: PDB Molecule:pyoverdine biosynthesis protein pvca; PDBTitle: crystal structure of the pvca (pa2254) protein from pseudomonas2 aeruginosa</p> <p>PDB header:transcription regulator</p>
57	c3t76A	Alignment	not modelled	23.3	8	<p>Chain: A: PDB Molecule:transcriptional regulator vanug; PDBTitle: crystal structure of transcriptional regulator vanug, form ii</p>
58	d1wpga2	Alignment	not modelled	23.2	12	<p>Fold:HAD-like Superfamily:HAD-like Family:Meta-cation ATPase, catalytic domain P</p>
59	c3knzA	Alignment	not modelled	23.0	6	<p>PDB header:sugar binding protein Chain: A: PDB Molecule:putative sugar binding protein; PDBTitle: crystal structure of putative sugar binding protein (np_459565.1) from2 salmonella typhimurium lt2 at 2.50 a resolution</p>
60	c2infB	Alignment	not modelled	22.9	26	<p>PDB header:lyase Chain: B: PDB Molecule:uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from2 bacillus subtilis</p>
61	c2fhyL	Alignment	not modelled	22.0	25	<p>PDB header:hydrolase Chain: L: PDB Molecule:fructose-1,6-bisphosphatase 1; PDBTitle: structure of human liver fpbase complexed with a novel2 benzoxazole as allosteric inhibitor</p>
62	d1uc8a1	Alignment	not modelled	21.2	20	<p>Fold:PreATP-grasp domain Superfamily:PreATP-grasp domain Family:Lysine biosynthesis enzyme LysX, N-terminal domain</p>
63	d1uj4a1	Alignment	not modelled	20.5	19	<p>Fold:NagB/RpiA/CoA transferase-like Superfamily:NagB/RpiA/CoA transferase-like Family:D-ribose-5-phosphate isomerase (RpiA), catalytic domain</p>
64	d3by5a1	Alignment	not modelled	20.5	18	<p>Fold:CobE/GbiG C-terminal domain-like Superfamily:CobE/GbiG C-terminal domain-like Family:CobE/GbiG C-terminal domain-like</p>
65	c3by5A	Alignment	not modelled	20.5	18	<p>PDB header:biosynthetic protein Chain: A: PDB Molecule:cobalamin biosynthesis protein; PDBTitle: crystal structure of cobalamin biosynthesis protein chig from2 agrobacterium tumefaciens str. c58</p>
66	c1oi7A	Alignment	not modelled	20.5	17	<p>PDB header:synthetase Chain: A: PDB Molecule:succinyl-coa synthetase alpha chain; PDBTitle: the crystal structure of succinyl-coa synthetase alpha2 subunit from thermus thermophilus</p>
67	c2gq1A	Alignment	not modelled	20.4	20	<p>PDB header:hydrolase Chain: A: PDB Molecule:fructose-1,6-bisphosphatase; PDBTitle: crystal structure of recombinant type i fructose-1,6-bisphosphatase2 from escherichia coli complexed with sulfate ions</p>
68	d1lib	Alignment	not modelled	19.4	19	<p>Fold:lambda repressor-like DNA-binding domains Superfamily:lambda repressor-like DNA-binding domains Family:Phage repressors</p>
69	c3r38A	Alignment	not modelled	19.4	23	<p>PDB header:transferase Chain: A: PDB Molecule:udp-n-acetylglucosamine 1-carboxyvinyltransferase 1; PDBTitle: 2.23 angstrom resolution crystal structure of udp-n-acetylglucosamine 1-carboxyvinyltransferase (mura) from listeria monocytogenes egd-e</p>
70	c3ht4B	Alignment	not modelled	19.0	12	<p>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</p>
71	c2b8eb	Alignment	not modelled	18.7	15	<p>PDB header:membrane protein Chain: B: PDB Molecule:cation-transporting atpase; PDBTitle: copa atp binding domain</p>
72	c2z01A	Alignment	not modelled	18.7	9	<p>PDB header:ligase Chain: A: PDB Molecule:phosphoribosylformylglycinamide cyclo-ligase; PDBTitle: crystal structure of phosphoribosylaminoimidazole2 synthetase from geobacillus kaustophilus</p>
73	c2duwA	Alignment	not modelled	18.1	16	<p>PDB header:ligand binding protein Chain: A: PDB Molecule:putative coa-binding protein; PDBTitle: solution structure of putative coa-binding protein of2 klebsiella pneumoniae</p>
74	d1v8ba2	Alignment	not modelled	18.1	17	<p>Fold:Flavodoxin-like Superfamily:Formate/glycerate dehydrogenase catalytic domain-like Family:S-adenosylhomocysteine hydrolase</p>
75	d1m1na	Alignment	not modelled	17.8	19	<p>Fold:Chelatase-like Superfamily:"Helical backbone" metal receptor Family:Nitrogenase iron-molybdenum protein</p>
76	c1x1oC	Alignment	not modelled	17.3	21	<p>PDB header:transferase Chain: C: PDB Molecule:nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of project id tt0268 from thermus thermophilus hb8</p>
77	c3mwdb	Alignment	not modelled	16.7	12	<p>PDB header:transferase Chain: B: PDB Molecule:atp-citrate synthase; PDBTitle: truncated human atp-citrate synthase with citrate bound</p>

78	d2ofya1	Alignment	not modelled	16.6	30	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: SinR domain-like
79	d1miob_	Alignment	not modelled	16.3	19	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
80	d1mioa_	Alignment	not modelled	16.2	13	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
81	d1lutxa_	Alignment	not modelled	16.1	25	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: SinR domain-like
82	c3bs3A_	Alignment	not modelled	15.9	36	PDB header: dna binding protein Chain: A: PDB Molecule: putative dna-binding protein; PDBTitle: crystal structure of a putative dna-binding protein from bacteroides2 fragilis
83	c3b7hA_	Alignment	not modelled	15.7	25	PDB header: structural protein Chain: A: PDB Molecule: prophage lp1 protein 11; PDBTitle: crystal structure of the prophage lp1 protein 11
84	d1ccwa_	Alignment	not modelled	15.3	23	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
85	c3fd0B_	Alignment	not modelled	15.3	8	PDB header: lyase Chain: B: PDB Molecule: putative cystathione beta-lyase involved in aluminum PDBTitle: crystal structure of putative cystathione beta-lyase involved in2 aluminum resistance (np_470671.1) from listeria innocua at 2.12 a3 resolution
86	c3ff4A_	Alignment	not modelled	14.8	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of uncharacterized protein chu_1412
87	c3lisB_	Alignment	not modelled	14.7	27	PDB header: transcription Chain: B: PDB Molecule: csp23li c protein; PDBTitle: crystal structure of the restriction-modification controller protein2 c.csp23li (monoclinic form)
88	c3nkIA_	Alignment	not modelled	14.5	18	PDB header: oxidoreductase/lyase Chain: A: PDB Molecule: udp-d-quinovosamine 4-dehydrogenase; PDBTitle: crystal structure of udp-d-quinovosamine 4-dehydrogenase from vibrio2 fischeri
89	c3cnhA_	Alignment	not modelled	14.5	13	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase family protein; PDBTitle: crystal structure of predicted hydrolase of haloacid dehalogenase-like2 superfamily (np_295428.1) from deinococcus radiodurans at 1.66 a3 resolution
90	c3ej6D_	Alignment	not modelled	14.5	27	PDB header: oxidoreductase Chain: D: PDB Molecule: catalase-3; PDBTitle: neurospora crassa catalase-3 crystal structure
91	d2vgna3	Alignment	not modelled	14.3	11	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: ERF1/Dom34 C-terminal domain-like
92	c2jtvA_	Alignment	not modelled	14.3	8	PDB header: structural genomics Chain: A: PDB Molecule: protein of unknown function; PDBTitle: solution structure of protein rpa3401, northeast structural genomics2 consortium target rpt7, ontario center for structural proteomics3 target rp3384
93	c3fkjA_	Alignment	not modelled	14.1	15	PDB header: isomerase Chain: A: PDB Molecule: putative phosphosugar isomerases; PDBTitle: crystal structure of a putative phosphosugar isomerase (stm 0572) from2 salmonella typhimurium lt2 at 2.12 a resolution
94	c3clhA_	Alignment	not modelled	13.8	21	PDB header: lyase Chain: A: PDB Molecule: 3-dehydroquinate synthase; PDBTitle: crystal structure of 3-dehydroquinate synthase (dhqs)from2 helicobacter pylori
95	d1x52a1	Alignment	not modelled	13.5	11	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: ERF1/Dom34 C-terminal domain-like
96	d1ejda_	Alignment	not modelled	13.4	22	Fold: IF3-like Superfamily: EPT/RTPC-like Family: Enolpyruvate transferase, EPT
97	d1ri9a_	Alignment	not modelled	13.1	20	Fold: SH3-like barrel Superfamily: SH3-domain Family: SH3-domain
98	c1ri9A_	Alignment	not modelled	13.1	20	PDB header: signaling protein Chain: A: PDB Molecule: fyn-binding protein; PDBTitle: structure of a helically extended sh3 domain of the t cell2 adapter protein adap
99	d2cyga1	Alignment	not modelled	13.0	9	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases