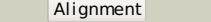
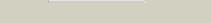
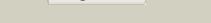
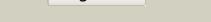
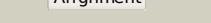
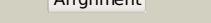
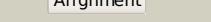


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	B8YM76
Date	Thu Jan 5 10:55:43 GMT 2012
Unique Job ID	17a77d37b58457a3

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1y6va1			100.0	100	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
2	d1k7ha_			100.0	36	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
3	d1zed1			100.0	33	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
4	c1ew2A_			100.0	33	PDB header: hydrolase Chain: A: PDB Molecule: phosphatase; PDBTitle: crystal structure of a human phosphatase
5	c3e2dB_			100.0	33	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: the 1.4 a crystal structure of the large and cold-active2 vibrio sp. alkaline phosphatase
6	c2x98A_			100.0	33	PDB header: hydrolase Chain: A: PDB Molecule: alkaline phosphatase; PDBTitle: h.salinarum alkaline phosphatase
7	c2w0yB_			100.0	33	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: h.salinarum alkaline phosphatase
8	c3a52A_			100.0	36	PDB header: hydrolase Chain: A: PDB Molecule: cold-active alkaline phosphatase; PDBTitle: crystal structure of cold-active alkaiine phosphatase from2 psychrophile shewanella sp.
9	c2iucB_			100.0	31	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: structure of alkaline phosphatase from the antarctic2 bacterium tab5
10	c3m8yC_			99.9	20	PDB header: isomerase Chain: C: PDB Molecule: phosphopentomutase; PDBTitle: phosphopentomutase from bacillus cereus after glucose-1,6-bisphosphate2 activation
11	c2i09A_			99.9	18	PDB header: isomerase Chain: A: PDB Molecule: phosphopentomutase; PDBTitle: crystal structure of putative phosphopentomutase from streptococcus2 mutans

12	c3igzB	Alignment		99.7	20	PDB header: isomerase Chain: B: PDB Molecule: cofactor-independent phosphoglycerate mutase; PDBTitle: crystal structures of leishmania mexicana phosphoglycerate2 mutase at low cobalt concentration
13	c1o98A	Alignment		99.6	18	PDB header: isomerase Chain: A: PDB Molecule: 2,3-bisphosphoglycerate-independent PDBTitle: 1.4a crystal structure of phosphoglycerate mutase from2 bacillus stearothermophilus complexed with3 2-phosphoglycerate
14	d1o98a2	Alignment		99.5	21	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: 2,3-Bisphosphoglycerate-Independent phosphoglycerate mutase, catalytic domain
15	d1hdha	Alignment		99.5	19	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
16	c3ed4A	Alignment		99.5	22	PDB header: transferase Chain: A: PDB Molecule: arylsulfatase; PDBTitle: crystal structure of putative arylsulfatase from escherichia coli
17	d1auka	Alignment		99.4	20	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
18	c3q3qA	Alignment		99.4	21	PDB header: hydrolase Chain: A: PDB Molecule: alkaline phosphatase; PDBTitle: crystal structure of spap: an novel alkaline phosphatase from2 bacterium sphingomonas sp. strain bsar-1
19	d1p49a	Alignment		99.4	20	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
20	d2i09a1	Alignment		99.3	19	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: DeoB catalytic domain-like
21	c3lxqB	Alignment	not modelled	99.3	18	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein vp1736; PDBTitle: the crystal structure of a protein in the alkaline2 phosphatase superfamily from vibrio parahaemolyticus to3 1.95a PDB header: hydrolase Chain: A: PDB Molecule: putative sulfatase;
22	c2vqrA	Alignment	not modelled	99.2	14	PDBTitle: crystal structure of a phosphonate monoester hydrolase2 from rhizobium leguminosarum: a new member of the3 alkaline phosphatase superfamily PDB header: transferase Chain: B: PDB Molecule: processed glycerol phosphate lipoteichoic acid synthase 2;
23	c2w8dB	Alignment	not modelled	99.2	15	PDBTitle: distinct and essential morphogenic functions for wall-and2 lipo-teichoic acids in bacillus subtilis PDB header: hydrolase Chain: A: PDB Molecule: putative sulfatase yidj;
24	c2qzuA	Alignment	not modelled	99.2	14	PDBTitle: crystal structure of the putative sulfatase yidj from bacteroides2 fragilis. northeast structural genomics consortium target bfr123 PDB header: transferase Chain: A: PDB Molecule: processed glycerol phosphate lipoteichoic acid
25	c2w5tA	Alignment	not modelled	99.2	15	PDBTitle: structure-based mechanism of lipoteichoic acid synthesis by staphylococcus aureus Itas.
26	d1fsua	Alignment	not modelled	99.2	20	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
27	c2xrgA	Alignment	not modelled	99.2	22	PDB header: hydrolase Chain: A: PDB Molecule: ectonucleotide pyrophosphatase/phosphodiesterase family PDBTitle: crystal structure of autotaxin (enpp2) in complex with the2 ha155 boronic acid inhibitor PDB header: hydrolase

28	c2xr9A_		Alignment	not modelled	99.2	22	Chain: A: PDB Molecule: ectonucleotide pyrophosphatase/phosphodiesterase family PDBTitle: crystal structure of autotxin (enpp2) PDB header: hydrolase
29	c3b5qB_		Alignment	not modelled	99.1	19	Chain: B: PDB Molecule: putative sulfatase yidj; PDBTitle: crystal structure of a putative sulfatase (np_810509.1)2 from bacteroides thetaiotomicron vpi-5482 at 2.40 a ³ resolution PDB header: isomerase
30	c2zktB_		Alignment	not modelled	98.9	20	Chain: B: PDB Molecule: 2,3-bisphosphoglycerate-independent phosphoglycerate PDBTitle: structure of ph0037 protein from pyrococcus horikoshii
31	d1ei6a_		Alignment	not modelled	98.5	23	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Phosphonoacetate hydrolase
32	c3szza_		Alignment	not modelled	98.5	18	PDB header: hydrolase Chain: A: PDB Molecule: phosphonoacetate hydrolase; PDBTitle: crystal structure of phosphonoacetate hydrolase from sinorhizobium2 meliloti 1021 in complex with acetate
33	c2gsoB_		Alignment	not modelled	98.3	20	PDB header: hydrolase Chain: B: PDB Molecule: phosphodiesterase-nucleotide pyrophosphatase; PDBTitle: structure of xac nucleotide2 pyrophosphatase/phosphodiesterase in complex with vanadate
34	c2d1gB_		Alignment	not modelled	96.8	16	PDB header: hydrolase Chain: B: PDB Molecule: acid phosphatase; PDBTitle: structure of francisella tularensis acid phosphatase a (acpa) bound to orthovanadate
35	c3iddA_		Alignment	not modelled	82.6	25	PDB header: isomerase Chain: A: PDB Molecule: 2,3-bisphosphoglycerate-independent PDBTitle: cofactor-independent phosphoglycerate mutase from thermoplasma acidophilum dsm 1728
36	d1b4ub_		Alignment	not modelled	72.9	23	Fold: Phosphorylase/hydrolase-like Superfamily: LigB-like Family: LigB-like
37	d2ihta3		Alignment	not modelled	36.9	16	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Pyruvate oxidase and decarboxylase PP module
38	d1j8fa_		Alignment	not modelled	30.3	16	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Sir2 family of transcriptional regulators
39	d1frfs_		Alignment	not modelled	29.0	25	Fold: HydA/Nqo6-like Superfamily: HydA/Nqo6-like Family: Nickel-iron hydrogenase, small subunit
40	c2q1wC_		Alignment	not modelled	29.0	13	PDB header: sugar binding protein Chain: C: PDB Molecule: putative nucleotide sugar epimerase/dehydratase; PDBTitle: crystal structure of the bordetella bronchiseptica enzyme wbmh in2 complex with nad+
41	c1q14A_		Alignment	not modelled	28.6	13	PDB header: hydrolase Chain: A: PDB Molecule: hst2 protein; PDBTitle: structure and autoregulation of the yeast hst2 homolog of sir2
42	c2pjuD_		Alignment	not modelled	23.9	16	PDB header: transcription Chain: D: PDB Molecule: propionate catabolism operon regulatory protein; PDBTitle: crystal structure of propionate catabolism operon2 regulatory protein prpr
43	c2pr7A_		Alignment	not modelled	21.4	32	PDB header: hydrolase Chain: A: PDB Molecule: haloacid dehalogenase/epoxide hydrolase family; PDBTitle: crystal structure of uncharacterized protein (np_599989.1) from corynebacterium glutamicum atcc 13032 kitasato at 1.44 a resolution
44	d2pjua1		Alignment	not modelled	20.5	16	Fold: Chelatase-like Superfamily: PrpR receptor domain-like Family: PrpR receptor domain-like
45	d1wuis1		Alignment	not modelled	20.4	29	Fold: HydA/Nqo6-like Superfamily: HydA/Nqo6-like Family: Nickel-iron hydrogenase, small subunit
46	c1h2aS_		Alignment	not modelled	20.4	29	PDB header: oxidoreductase Chain: S: PDB Molecule: hydrogenase; PDBTitle: single crystals of hydrogenase from desulfovibrio vulgaris
47	c3bq9A_		Alignment	not modelled	20.2	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted rosmann fold nucleotide-binding domain- PDBTitle: crystal structure of predicted nucleotide-binding protein from2 idiomarina baltica os145
48	d1e3da_		Alignment	not modelled	19.3	29	Fold: HydA/Nqo6-like Superfamily: HydA/Nqo6-like Family: Nickel-iron hydrogenase, small subunit
49	d1u7pa_		Alignment	not modelled	19.0	18	Fold: HAD-like Superfamily: HAD-like Family: Magnesium-dependent phosphatase-1, Mdp1
50	d1xjca_		Alignment	not modelled	18.5	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
51	d1qlaa_		Alignment	not modelled	18.2	16	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Sir2 family of transcriptional regulators
52	c3glcC_		Alignment	not modelled	17.0	8	PDB header: hydrolase Chain: C: PDB Molecule: nad-dependent deacetylase sirtuin-3, PDBTitle: crystal structure of human sirt3
							Fold: Adenine nucleotide alpha hydrolase-like

53	d2a84a1	Alignment	not modelled	16.1	13	Superfamily: Nucleotidyl transferase Family: Pantothenate synthetase (Pantoate-beta-alanine ligase, PanC)
54	d1es9a_	Alignment	not modelled	16.0	21	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Acetylhydrolase
55	c3p94A_	Alignment	not modelled	15.7	17	PDB header: hydrolase Chain: A: PDB Molecule: gdsl-like lipase; PDBTitle: crystal structure of a gdsl-like lipase (bdi_0976) from2 parabacteroides distasonis atcc 8503 at 1.93 a resolution
56	c3t9qB_	Alignment	not modelled	15.6	25	PDB header: hydrolase Chain: B: PDB Molecule: stage ii sporulation protein e; PDBTitle: structure of the phosphatase domain of the cell fate determinant2 spoie from bacillus subtilis (mn presoaked)
57	d1j83a_	Alignment	not modelled	15.0	26	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: Family 17 carbohydrate binding module, CBM17
58	c2wpnA_	Alignment	not modelled	15.0	34	PDB header: oxidoreductase Chain: A: PDB Molecule: periplasmic [nifese] hydrogenase, small subunit; PDBTitle: structure of the oxidised, as-isolated nifese hydrogenase2 from d. vulgaris hildenborough
59	c3pu9A_	Alignment	not modelled	14.6	29	PDB header: transferase Chain: A: PDB Molecule: protein serine/threonine phosphatase; PDBTitle: crystal structure of serine/threonine phosphatase sphaerobacter2 thermophilus dsm 20745
60	d1ghca_	Alignment	not modelled	14.5	33	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
61	c3gvzB_	Alignment	not modelled	14.1	13	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein cv2077; PDBTitle: crystal structure of the protein cv2077 from2 chromobacterium violaceum. northeast structural genomics3 consortium target cvr62
62	d1uhma_	Alignment	not modelled	14.1	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
63	d1ozha3	Alignment	not modelled	14.0	24	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Pyruvate oxidase and decarboxylase PP module
64	c3ibsA_	Alignment	not modelled	14.0	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein batb; PDBTitle: crystal structure of conserved hypothetical protein batb from2 bacteroides thetaiotaomicron
65	d1t9ba3	Alignment	not modelled	13.9	24	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Pyruvate oxidase and decarboxylase PP module
66	d1qh8a_	Alignment	not modelled	13.6	6	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
67	d1p4da_	Alignment	not modelled	13.4	23	Fold: Origin of replication-binding domain, RBD-like Superfamily: Origin of replication-binding domain, RBD-like Family: Relaxase domain
68	c3b3jA_	Alignment	not modelled	13.3	31	PDB header: transferase Chain: A: PDB Molecule: histone-arginine methyltransferase carm1; PDBTitle: the 2.55 a crystal structure of the apo catalytic domain of2 coactivator-associated arginine methyl transferase i(carm1:28-507,3 residues 28-146 and 479-507 not ordered)
69	c3u1hA_	Alignment	not modelled	13.0	45	PDB header: oxidoreductase Chain: A: PDB Molecule: 3-isopropylmalate dehydrogenase; PDBTitle: crystal structure of ipmdh from the last common ancestor of bacillus
70	c2q5cA_	Alignment	not modelled	12.8	11	PDB header: transcription Chain: A: PDB Molecule: ntrc family transcriptional regulator; PDBTitle: crystal structure of ntrc family transcriptional regulator from2 clostridium acetobutylicum
71	c2kjwA_	Alignment	not modelled	12.8	38	PDB header: ribosomal protein Chain: A: PDB Molecule: 30s ribosomal protein s6; PDBTitle: solution structure and backbone dynamics of the permantut2 p54-55
72	d2d0oa2	Alignment	not modelled	12.7	29	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ATPase domain of dehydratase reactivase alpha subunit
73	d1fxwf_	Alignment	not modelled	12.2	21	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Acetylhydrolase
74	c1z2iA_	Alignment	not modelled	12.2	24	PDB header: oxidoreductase Chain: A: PDB Molecule: malate dehydrogenase; PDBTitle: crystal structure of agrobacterium tumefaciens malate2 dehydrogenase, new york structural genomics consortium
75	d1qyia_	Alignment	not modelled	12.1	23	Fold: HAD-like Superfamily: HAD-like Family: Hypothetical protein MW1667 (SA1546)
76	d1usta_	Alignment	not modelled	12.0	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
77	d1hsta_	Alignment	not modelled	12.0	37	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
78	c3uoeb_	Alignment	not modelled	12.0	20	PDB header: oxidoreductase Chain: B: PDB Molecule: dehydrogenase; PDBTitle: the crystal structure of dehydrogenase from sinorhizobium meliloti

79	d1ek6a		Alignment	not modelled	11.9	25	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
80	c3enkB		Alignment	not modelled	11.8	25	PDB header: isomerase Chain: B: PDB Molecule: udp-glucose 4-epimerase; PDBTitle: 1.9a crystal structure of udp-glucose 4-epimerase from2 burkholderia pseudomallei
81	c3cdiA		Alignment	not modelled	11.8	19	PDB header: transferase Chain: A: PDB Molecule: polynucleotide phosphorylase; PDBTitle: crystal structure of e. coli npnase
82	d1w0da		Alignment	not modelled	11.7	25	Fold: Isocitrate/isopropylmalate dehydrogenase-like Superfamily: Isocitrate/isopropylmalate dehydrogenase-like Family: Dimeric isocitrate & isopropylmalate dehydrogenases
83	d1cc1s		Alignment	not modelled	11.7	38	Fold: HydA/Nqo6-like Superfamily: HydA/Nqo6-like Family: Nickel-iron hydrogenase, small subunit
84	c3rgwS		Alignment	not modelled	11.4	29	PDB header: oxidoreductase/oxidoreductase Chain: S: PDB Molecule: membrane-bound hydrogenase (nife) small subunit hoxk; PDBTitle: crystal structure at 1.5 a resolution of an h2-reduced, o2-tolerant2 hydrogenase from ralstonia eutropha unmasks a novel iron-sulfur3 cluster
85	d1lxna		Alignment	not modelled	11.3	26	Fold: Ferredoxin-like Superfamily: MTH1187/YkoF-like Family: MTH1187-like
86	d1dj0a		Alignment	not modelled	11.2	10	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: Pseudouridine synthase I TruA
87	c3bz6A		Alignment	not modelled	11.1	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0502 protein pspto_2686; PDBTitle: crystal structure of a conserved protein of unknown function from pseudomonas syringae pv. tomato str. dc3000
88	d1ussa		Alignment	not modelled	11.0	30	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
89	c1nl3B		Alignment	not modelled	10.8	14	PDB header: protein transport Chain: B: PDB Molecule: preprotein translocase seca 1 subunit; PDBTitle: crystal structure of the seca protein translocation atpase2 from mycobacterium tuberculosis in apo form
90	d1yqaal		Alignment	not modelled	10.6	30	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Linker histone H1/H5
91	c1t9dB		Alignment	not modelled	10.3	24	PDB header: transferase Chain: B: PDB Molecule: acetolactate synthase, mitochondrial; PDBTitle: crystal structure of yeast acetohydroxyacid synthase in2 complex with a sulfonylurea herbicide, metsulfuron methyl
92	d1tfra2		Alignment	not modelled	10.2	18	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
93	d1pvda3		Alignment	not modelled	10.1	62	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Pyruvate oxidase and decarboxylase PP module
94	c2odaB		Alignment	not modelled	10.1	9	PDB header: protein binding Chain: B: PDB Molecule: hypothetical protein pspto_2114; PDBTitle: crystal structure of pspto_2114
95	c2iueA		Alignment	not modelled	9.6	14	PDB header: membrane protein Chain: A: PDB Molecule: pactolus i-domain; PDBTitle: pactolus i-domain: functional switching of the rossmann2 fold
96	d1nxua		Alignment	not modelled	9.6	16	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
97	d1xrha		Alignment	not modelled	9.6	16	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
98	d1e3ha5		Alignment	not modelled	9.3	10	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
99	c3blxl		Alignment	not modelled	9.2	14	PDB header: oxidoreductase Chain: L: PDB Molecule: isocitrate dehydrogenase [nad] subunit 2; PDBTitle: yeast isocitrate dehydrogenase (apo form)