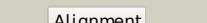
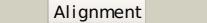
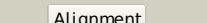
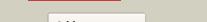
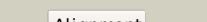


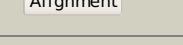
Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P39401
Date	Thu Jan 5 12:00:36 GMT 2012
Unique Job ID	5feb9c95edd1fc64

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2w5tA_	 Alignment		100.0	18	PDB header: transferase Chain: A; PDB Molecule: processed glycerol phosphate lipoteichoic acid PDBTitle: structure-based mechanism of lipoteichoic acid synthesis by2 staphylococcus aureus Itas.
2	c2w8dB_	 Alignment		100.0	20	PDB header: transferase Chain: B; PDB Molecule: processed glycerol phosphate lipoteichoic acid synthase 2; PDBTitle: distinct and essential morphogenic functions for wall-and2 lipo-teichoic acids in bacillus subtilis
3	c3lxqB_	 Alignment		100.0	25	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
4	d1fsua_	 Alignment		100.0	15	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
5	c3ed4A_	 Alignment		100.0	16	PDB header: transferase Chain: A; PDB Molecule: arylsulfatase; PDBTitle: crystal structure of putative arylsulfatase from escherichia coli
6	c2qzuA_	 Alignment		100.0	16	PDB header: hydrolase Chain: A; PDB Molecule: putative sulfatase yidj; PDBTitle: crystal structure of the putative sulfatase yidj from bacteroides2 fragilis. northeast structural genomics consortium target bfr123
7	d1auka_	 Alignment		100.0	16	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
8	d1hdha_	 Alignment		100.0	19	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase
9	c2vqrA_	 Alignment		100.0	19	PDB header: hydrolase Chain: A; PDB Molecule: putative sulfatase; PDBTitle: crystal structure of a phosphonate monoester hydrolase2 from rhizobium leguminosarum: a new member of the3 alkaline phosphatase superfamily
10	c3b5qB_	 Alignment		100.0	17	PDB header: hydrolase 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 Å resolution
11	d1p49a_	 Alignment		100.0	17	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Arylsulfatase

12	d1o98a2			100.0	17	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: 2,3-Bisphosphoglycerate-independent phosphoglycerate mutase, catalytic domain
13	d2i09a1			99.9	14	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: DeoB catalytic domain-like
14	c2zktB			99.9	17	PDB header: isomerase Chain: B: PDB Molecule: 2,3-bisphosphoglycerate-independent phosphoglycerate PDBTitle: structure of ph0037 protein from pyrococcus horikoshii
15	c3m8yC			99.9	14	PDB header: isomerase Chain: C: PDB Molecule: phosphopentomutase; PDBTitle: phosphopentomutase from bacillus cereus after glucose-1,6-bisphosphate2 activation
16	c2gsob			99.8	19	PDB header: hydrolase Chain: B: PDB Molecule: phosphodiesterase-nucleotide pyrophosphatase; PDBTitle: structure of xac nucleotide2 pyrophosphatase/phosphodiesterase in complex with vanadate
17	c3q3qA			99.8	18	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
18	c2i09A			99.8	18	PDB header: isomerase Chain: A: PDB Molecule: phosphopentomutase; PDBTitle: crystal structure of putative phosphopentomutase from streptococcus2 mutans
19	c2xr9A			99.7	14	PDB header: hydrolase Chain: A: PDB Molecule: ectonucleotide pyrophosphatase/phosphodiesterase family PDBTitle: crystal structure of autotaxin (enpp2)
20	c2xrgA			99.7	12	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
21	c3szza		not modelled	99.6	16	PDB header: hydrolase Chain: A: PDB Molecule: phosphonoacetate hydrolase; PDBTitle: crystal structure of phosphonoacetate hydrolase from sinorhizobium2 meliloti 1021 in complex with acetate
22	d1ei6a		not modelled	99.5	11	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Phosphonoacetate hydrolase
23	c1o98A		not modelled	99.4	19	PDB header: isomerase Chain: A: PDB Molecule: 2,3-bisphosphoglycerate-independent PDBTitle: 1.4a crystal structure of phosphoglycerate mutase from2 bacillus stearothermophilus complexed with 2-phosphoglycerate
24	c3igzB		not modelled	99.1	20	PDB header: isomerase Chain: B: PDB Molecule: cofactor-independent phosphoglycerate mutase; PDBTitle: crystal structures of leishmania mexicana phosphoglycerate2 mutase at low cobalt concentration
25	c2d1gB		not modelled	98.9	17	PDB header: hydrolase Chain: B: PDB Molecule: acid phosphatase; PDBTitle: structure of francisella tularensis acid phosphatase a (acpa) bound to2 orthovanadate
26	c2iucB		not modelled	98.8	17	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: structure of alkaline phosphatase from the antarctic2 bacterium tab5
27	d1y6va1		not modelled	98.8	19	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
28	c3a52A		not modelled	98.5	17	PDB header: hydrolase Chain: A: PDB Molecule: cold-active alkaline phosphatase; PDBTitle: crystal structure of cold-active alkaline phosphatase from2 psychrophile shewanella sp.

29	c2w0yB		Alignment	not modelled	98.5	18	PDB header: hydrolase Chain: B; PDB Molecule: alkaline phosphatase; PDBTitle: h.salinarum alkaline phosphatase
30	c2x98A		Alignment	not modelled	98.4	18	PDB header: hydrolase Chain: A; PDB Molecule: alkaline phosphatase; PDBTitle: h.salinarum alkaline phosphatase
31	c3e2dB		Alignment	not modelled	98.4	16	PDB header: hydrolase Chain: B; PDB Molecule: alkaline phosphatase; PDBTitle: the 1.4 Å crystal structure of the large and cold-active2 vibrio sp. alkaline phosphatase
32	d1zeda1		Alignment	not modelled	98.4	19	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
33	c1ew2A		Alignment	not modelled	98.4	19	PDB header: hydrolase Chain: A; PDB Molecule: phosphatase; PDBTitle: crystal structure of a human phosphatase
34	d1k7ha		Alignment	not modelled	98.3	16	Fold: Alkaline phosphatase-like Superfamily: Alkaline phosphatase-like Family: Alkaline phosphatase
35	c3iddA		Alignment	not modelled	54.2	19	PDB header: isomerase Chain: A; PDB Molecule: 2,3-bisphosphoglycerate-independent PDBTitle: cofactor-independent phosphoglycerate mutase from2 thermoplasma acidophilum dsm 1728
36	d3sila		Alignment	not modelled	31.5	33	Fold: 6-bladed beta-propeller Superfamily: Sialidases Family: Sialidases (neuraminidases)
37	c3pr9A		Alignment	not modelled	30.8	27	PDB header: chaperone Chain: A; PDB Molecule: fkbp-type peptidyl-prolyl cis-trans isomerase; PDBTitle: structural analysis of protein folding by the methanococcus jannaschii 2 chaperone fkbp26
38	c2kr7A		Alignment	not modelled	27.3	32	PDB header: isomerase Chain: A; PDB Molecule: fkbp-type peptidyl-prolyl cis-trans isomerase slyd; PDBTitle: solution structure of helicobacter pylori slyd
39	d1b4ub		Alignment	not modelled	23.3	24	Fold: Phosphorylase/hydrolase-like Superfamily: LigB-like Family: LigB-like
40	c2kfwA		Alignment	not modelled	22.3	30	PDB header: isomerase Chain: A; PDB Molecule: fkbp-type peptidyl-prolyl cis-trans isomerase PDBTitle: solution structure of full-length slyd from e.coli
41	d1ix5a		Alignment	not modelled	20.7	35	Fold: FKBP-like Superfamily: FKBP-like Family: FKBP immunophilin/proline isomerase
42	c3bh2C		Alignment	not modelled	20.4	13	PDB header: lyase Chain: C; PDB Molecule: acetoacetate decarboxylase; PDBTitle: structural studies of acetoacetate decarboxylase
43	c2xoaa		Alignment	not modelled	17.7	21	PDB header: metal transport Chain: A; PDB Molecule: ryanodine receptor 1; PDBTitle: crystal structure of the n-terminal three domains of the2 skeletal muscle ryanodine receptor (rry1)
44	c2o1sC		Alignment	not modelled	16.4	10	PDB header: transferase Chain: C; PDB Molecule: 1-deoxy-d-xylulose-5-phosphate synthase; PDBTitle: 1-deoxy-d-xylulose 5-phosphate synthase (dxs) from2 escherichia coli
45	c3g81D		Alignment	not modelled	15.5	10	PDB header: immune system Chain: D; PDB Molecule: lectin-related nk cell receptor ly49I1; PDBTitle: crystal structure of murine natural killer cell receptor,2 ly49I4
46	c3ippA		Alignment	not modelled	15.3	6	PDB header: transferase Chain: A; PDB Molecule: putative thiosulfate sulfurtransferase ynj; PDBTitle: crystal structure of sulfur-free ynj
47	d2z1aa2		Alignment	not modelled	14.2	17	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain
48	c3prdA		Alignment	not modelled	14.0	25	PDB header: chaperone, isomerase Chain: A; PDB Molecule: fkbp-type peptidyl-prolyl cis-trans isomerase; PDBTitle: structural analysis of protein folding by the methanococcus jannaschii 2 chaperone fkbp26
49	d2jn4a1		Alignment	not modelled	13.8	13	Fold: NifT/FixU barrel-like Superfamily: NifT/FixU-like Family: NifT/FixU
50	c2jn4A		Alignment	not modelled	13.8	13	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein fixu, nifT; PDBTitle: solution nmr structure of protein rp4601 from2 rhopseudomonas palustris. northeast structural genomics3 consortium target rpt2; ontario center for structural4 proteomics target rp4601.
51	d2bdea1		Alignment	not modelled	13.4	12	Fold: HAD-like Superfamily: HAD-like Family: 5' nucleotidase-like
52	c2qy1B		Alignment	not modelled	13.3	43	PDB header: lyase Chain: B; PDB Molecule: pectate lyase ii; PDBTitle: pectate lyase a31g/r236f from xanthomonas campestris
53	c2jtqA		Alignment	not modelled	13.2	12	PDB header: transferase Chain: A; PDB Molecule: phage shock protein e; PDBTitle: rhodanese from e.coli
54	c2k8iA		Alignment	not modelled	12.8	32	PDB header: isomerase Chain: A; PDB Molecule: peptidyl-prolyl cis-trans isomerase;

					PDBTitle: solution structure of e.coli slyd
55	d2hkja2	Alignment	not modelled	12.7	5 Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: DNA gyrase/MutL, second domain
56	d1v4aa2	Alignment	not modelled	12.5	40 Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: GlnE-like domain
57	c2vbeA	Alignment	not modelled	12.5	36 PDB header: viral protein Chain: A: PDB Molecule: tailspike-protein; PDBTitle: tailspike protein of bacteriophage sf6
58	c3o2qB	Alignment	not modelled	12.5	53 PDB header: hydrolase Chain: B: PDB Molecule: rna polymerase ii subunit a c-terminal domain phosphatase PDBTitle: crystal structure of the human symplekin-ssu72-ctd phosphopeptide2 complex PDB header: hydrolase
59	c3o2sB	Alignment	not modelled	12.3	53 Chain: B: PDB Molecule: rna polymerase ii subunit a c-terminal domain phosphatase PDBTitle: crystal structure of the human symplekin-ssu72 complex
60	d2g50a3	Alignment	not modelled	11.7	31 Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
61	d2r6gf1	Alignment	not modelled	11.5	19 Fold: MalF N-terminal region-like Superfamily: MalF N-terminal region-like Family: MalF N-terminal region-like
62	c3bgtD	Alignment	not modelled	11.3	23 PDB header: lyase Chain: D: PDB Molecule: probable acetoacetate decarboxylase; PDBTitle: structural studies of acetoacetate decarboxylase
63	c1okgA	Alignment	not modelled	11.0	18 PDB header: transferase Chain: A: PDB Molecule: possible 3-mercaptopropionate sulfurtransferase; PDBTitle: 3-mercaptopropionate sulfurtransferase from leishmania major
64	c3lmyA	Alignment	not modelled	10.8	31 PDB header: hydrolase Chain: A: PDB Molecule: beta-hexosaminidase subunit beta; PDBTitle: the crystal structure of beta-hexosaminidase b in complex with2 pyrimethamine
65	d1xo1a2	Alignment	not modelled	10.8	20 Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
66	c2o30A	Alignment	not modelled	10.7	18 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: nuclear movement protein; PDBTitle: nuclear movement protein from e. cuniculi gb-m1
67	d1usha2	Alignment	not modelled	10.6	10 Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain
68	c2vk7A	Alignment	not modelled	10.4	17 PDB header: hydrolase Chain: A: PDB Molecule: exo-alpha-sialidase; PDBTitle: the structure of clostridium perfringens nani sialidase and2 its catalytic intermediates
69	d1pe9a	Alignment	not modelled	10.2	43 Fold: Single-stranded right-handed beta-helix Superfamily: Pectin lyase-like Family: Pectate lyase-like
70	d2nxfa1	Alignment	not modelled	10.1	9 Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: ADPRibase-Mn-like
71	c2ihna	Alignment	not modelled	10.1	14 PDB header: hydrolase/dna Chain: A: PDB Molecule: ribonuclease h; PDBTitle: co-crystal of bacteriophage t4 rnase h with a fork dna2 substrate
72	d1a3xa3	Alignment	not modelled	10.0	23 Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
73	d1pcl	Alignment	not modelled	9.9	57 Fold: Single-stranded right-handed beta-helix Superfamily: Pectin lyase-like Family: Pectate lyase-like
74	d1qhma	Alignment	not modelled	9.9	17 Fold: PFL-like glycol radical enzymes Superfamily: PFL-like glycol radical enzymes Family: PFL-like
75	c2osIP	Alignment	not modelled	9.8	22 PDB header: immune system Chain: P: PDB Molecule: b-lymphocyte antigen cd20; PDBTitle: crystal structure of rituximab fab in complex with an2 epitope peptide
76	c3cgna	Alignment	not modelled	9.8	36 PDB header: isomerase Chain: A: PDB Molecule: peptidyl-prolyl cis-trans isomerase; PDBTitle: crystal structure of thermophilic slyd
77	d2cnza1	Alignment	not modelled	9.6	21 Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Bacterial adhesins Family: Pilus subunits
78	d2co3a1	Alignment	not modelled	9.5	21 Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Bacterial adhesins Family: Pilus subunits
79	c3k7dA	Alignment	not modelled	9.4	32 PDB header: transferase Chain: A: PDB Molecule: glutamate-ammonia-ligase adenyllyltransferase; PDBTitle: c-terminal (adenylation) domain of e.coli glutamine synthetase2 adenyllyltransferase
80	d1g0da1	Alignment	not modelled	9.2	17 Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Transglutaminase N-terminal domain

81	d1tfra2	Alignment	not modelled	9.2	24	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
82	c2xmoB	Alignment	not modelled	9.0	15	PDB header: hydrolase Chain: B: PDB Molecule: lmo2642 protein; PDBTitle: the crystal structure of lmo2642
83	d1fx0a3	Alignment	not modelled	8.9	12	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain) PDB header: hydrolase
84	c2v4oB	Alignment	not modelled	8.7	18	Chain: B: PDB Molecule: multifunctional protein sur e; PDBTitle: crystal structure of salmonella typhimurium sur e at 2.752 angstrom resolution in monoclinic form
85	c2qfaC	Alignment	not modelled	8.7	31	PDB header: cell cycle/cell cycle/cell cycle Chain: C: PDB Molecule: inner centromere protein; PDBTitle: crystal structure of a survivin-borealin-incenp core complex
86	c1oftC	Alignment	not modelled	8.4	17	PDB header: bacterial cell division inhibitor Chain: C: PDB Molecule: hypothetical protein pa3008; PDBTitle: crystal structure of sula from pseudomonas aeruginosa
87	c2osiQ	Alignment	not modelled	8.3	24	PDB header: immune system Chain: Q: PDB Molecule: b-lymphocyte antigen cd20; PDBTitle: crystal structure of rituximab fab in complex with an2 epitope peptide
88	c2rhqA	Alignment	not modelled	8.2	17	PDB header: ligase Chain: A: PDB Molecule: phenylalanyl-trna synthetase alpha chain; PDBTitle: phers from staphylococcus haemolyticus- rational protein2 engineering and inhibitor studies
89	d2nvpa1	Alignment	not modelled	8.1	13	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: CPFO428-like
90	c2jcmA	Alignment	not modelled	8.0	20	PDB header: hydrolase Chain: A: PDB Molecule: cytosolic purine 5'-nucleotidase; PDBTitle: crystal structure of human cytosolic 5'-nucleotidase ii in2 complex with beryllium trifluoride
91	d1idka	Alignment	not modelled	7.9	43	Fold: Single-stranded right-handed beta-helix Superfamily: Pectin lyase-like Family: Pectin lyase
92	d1okgal	Alignment	not modelled	7.9	15	Fold: Rhodanese/Cell cycle control phosphatase Superfamily: Rhodanese/Cell cycle control phosphatase Family: Multidomain sulfurtransferase (rhodanese)
93	c1vbla	Alignment	not modelled	7.8	33	PDB header: lyase Chain: A: PDB Molecule: pectate lyase 47; PDBTitle: structure of the thermostable pectate lyase pl 47
94	c2kyA	Alignment	not modelled	7.8	25	PDB header: unknown function Chain: A: PDB Molecule: patellamide protein; PDBTitle: solution structure of the leader sequence of the patellamide precursor2 peptide, pate1-34
95	c2zxeB	Alignment	not modelled	7.8	25	PDB header: hydrolase/transport protein Chain: B: PDB Molecule: na+-k+-atpase beta subunit; PDBTitle: crystal structure of the sodium - potassium pump in the e2.2k+.pi2 state
96	d1skyb3	Alignment	not modelled	7.7	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
97	d2nuja1	Alignment	not modelled	7.7	7	Fold: Thioesterase/thiol ester dehydrase-isomerase Superfamily: Thioesterase/thiol ester dehydrase-isomerase Family: 4HBT-like
98	c3d1pA	Alignment	not modelled	7.6	10	PDB header: transferase Chain: A: PDB Molecule: putative thiosulfate sulfurtransferase yor285w; PDBTitle: atomic resolution structure of uncharacterized protein from2 saccharomyces cerevisiae
99	d1ofua2	Alignment	not modelled	7.6	20	Fold: Bacillus chorismate mutase-like Superfamily: Tubulin C-terminal domain-like Family: Tubulin, C-terminal domain