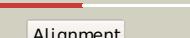
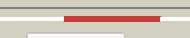


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0A6K1
Date	Thu Jan 5 11:03:19 GMT 2012
Unique Job ID	cd257c9fa68cef1

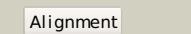
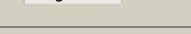
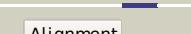
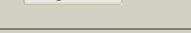
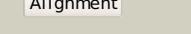
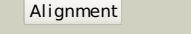
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2gkjA_			100.0	77	PDB header: isomerase Chain: A; PDB Molecule: diaminopimelate epimerase; PDBTitle: crystal structure of diaminopimelate epimerase in complex2 with an irreversible inhibitor dl-azidap
2	c3ekmE_			100.0	41	PDB header: isomerase Chain: E; PDB Molecule: diaminopimelate epimerase, chloroplastic; PDBTitle: crystal structure of diaminopimelate epimerase form2 arabidopsis thaliana in complex with irreversible inhibitor3 dl-azidap
3	c3fveA_			100.0	31	PDB header: isomerase Chain: A; PDB Molecule: diaminopimelate epimerase; PDBTitle: crystal structure of diaminopimelate epimerase mycobacterium2 tuberculosis dafp
4	c2otnB_			100.0	33	PDB header: isomerase Chain: B; PDB Molecule: diaminopimelate epimerase; PDBTitle: crystal structure of the catalytically active form of diaminopimelate2 epimerase from bacillus anthracis
5	c3ednb_			100.0	20	PDB header: biosynthetic protein Chain: B; PDB Molecule: phenazine biosynthesis protein, phzf family; PDBTitle: crystal structure of the bacillus anthracis phenazine2 biosynthesis protein, phzf family
6	c1qy9B_			100.0	17	PDB header: unknown function Chain: B; PDB Molecule: hypothetical protein ydde; PDBTitle: crystal structure of e. coli se-met protein ydde
7	c1ym5A_			100.0	17	PDB header: oxidoreductase Chain: A; PDB Molecule: hypothetical 32.6 kda protein in dap2-slt2 PDBTitle: crystal structure of yhi9, the yeast member of the2 phenazine biosynthesis phzf enzyme superfamily.
8	d1s7ja_			100.0	14	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PhzC/PhzF-like
9	c1u1wA_			100.0	20	PDB header: isomerase, lyase Chain: A; PDB Molecule: phenazine biosynthesis protein phzf; PDBTitle: structure and function of phenazine-biosynthesis protein phzf from2 pseudomonas fluorescens 2-79
10	c1u0ka_			100.0	19	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: gene product pa4716; PDBTitle: the structure of a predicted epimerase pa4716 from pseudomonas2 aeruginosa
11	c2azpA_			100.0	17	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein pa1268; PDBTitle: crystal structure of pa1268 solved by sulfur sad

12	d2gkeal			100.0	81	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: Diaminopimelate epimerase
13	c1w62B			100.0	15	PDB header: racemase Chain: B: PDB Molecule: b-cell mitogen; PDBTitle: proline racemase in complex with one molecule of pyrrole-2-2 carboxylic acid (hemi form)
14	d1tm0a			100.0	17	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: Proline racemase
15	d2gkeal2			100.0	75	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: Diaminopimelate epimerase
16	d1qy9a1			99.9	21	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PhzC/PhzF-like
17	d1xuba1			99.9	17	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PhzC/PhzF-like
18	d1xuba2			99.9	20	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PhzC/PhzF-like
19	d1u0ka1			99.9	18	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PhzC/PhzF-like
20	d1qy9a2			99.8	15	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PhzC/PhzF-like
21	d1u0ka2		not modelled	99.7	20	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PhzC/PhzF-like
22	c3g7kD		not modelled	98.6	16	PDB header: isomerase Chain: D: PDB Molecule: 3-methylitaconate isomerase; PDBTitle: crystal structure of methylitaconate-delta-isomerase
23	c2pw0A		not modelled	98.4	20	PDB header: unknown function Chain: A: PDB Molecule: prf methylaconitate isomerase; PDBTitle: crystal structure of trans-aconitate bound to methylaconitate2 isomerase prf from shewanella oneidensis
24	d2h9fa2		not modelled	96.6	21	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PA0793-like
25	d2h9fa1		not modelled	61.8	15	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PA0793-like
26	c3g12A		not modelled	39.2	11	PDB header: lyase Chain: A: PDB Molecule: putative lactoylglutathione lyase; PDBTitle: crystal structure of a putative lactoylglutathione lyase2 from bdellovibrio bacteriovorus
27	c3ldgA		not modelled	36.9	19	PDB header: transferase Chain: C: PDB Molecule: putative uncharacterized protein smu.472; PDBTitle: crystal structure of smu.472, a putative methyltransferase complexed2 with sah
28	c3sk1C		not modelled	31.5	24	PDB header: griseoluteate-binding protein Chain: C: PDB Molecule: ehpr; PDBTitle: crystal structure of phenazine resistance protein ehpr from2 enterobacter agglomerans (erwinia herbicola, pantoea agglomerans)3 eh1087, apo form

29	c213ba	Alignment	not modelled	30.0	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein found in conjugate transposon; PDBTitle: solution nmr structure of the bt_0084 lipoprotein from bacteroides2 thetaiotaomicron, northeast structural genomics consortium target3 bt376
30	d1o9ga	Alignment	not modelled	29.6	20	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: RNA methyltransferase AviRa
31	c2l7qa	Alignment	not modelled	27.9	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein found in conjugate transposon; PDBTitle: solution nmr structure of conjugate transposon protein bvu_1572(27-2 141) from bacteroides vulgaris, northeast structural genomics3 consortium target bvr155
32	c3k0ba	Alignment	not modelled	26.0	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted n6-adenine-specific dna methylase; PDBTitle: crystal structure of a predicted n6-adenine-specific dna methylase2 from listeria monocytogenes str. 4b f2365
33	c1g38a	Alignment	not modelled	22.2	38	PDB header: transferase/dna Chain: A: PDB Molecule: modification methylase taqI; PDBTitle: adenine-specific methyltransferase m. taq I/dna complex
34	d2f8la1	Alignment	not modelled	21.0	14	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: N-6 DNA Methylase-like
35	d2ar0a1	Alignment	not modelled	19.8	13	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: N-6 DNA Methylase-like
36	d1c4qa	Alignment	not modelled	19.6	15	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
37	c3lkdb	Alignment	not modelled	19.0	38	PDB header: transferase Chain: B: PDB Molecule: type i restriction-modification system PDBTitle: crystal structure of the type i restriction-modification2 system methyltransferase subunit from streptococcus3 thermophilus, northeast structural genomics consortium4 target sur80
38	c3lduA	Alignment	not modelled	17.8	14	PDB header: transferase Chain: A: PDB Molecule: putative methylase; PDBTitle: the crystal structure of a possible methylase from2 clostridium difficile 630.
39	d2ih2a1	Alignment	not modelled	17.7	18	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: DNA methylase Taql, N-terminal domain
40	c2kjza	Alignment	not modelled	17.0	10	PDB header: unknown function Chain: A: PDB Molecule: atc0852; PDBTitle: solution nmr structure of protein atc0852 from agrobacterium2 tumefaciens, northeast structural genomics consortium (nsg) target3 att2.
41	d1sr8a	Alignment	not modelled	16.4	19	Fold: CbiD-like Superfamily: CbiD-like Family: CbiD-like
42	c1aqjB	Alignment	not modelled	15.6	21	PDB header: methyltransferase Chain: B: PDB Molecule: adenine-n6-dna-methyltransferase taqI; PDBTitle: structure of adenine-n6-dna-methyltransferase taqI
43	d1r4pb	Alignment	not modelled	15.4	17	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
44	c3owvA	Alignment	not modelled	14.9	16	PDB header: hydrolase Chain: A: PDB Molecule: dna-entry nuclease; PDBTitle: structural insights into catalytic and substrate binding mechanisms of2 the strategic enda nuclease from streptococcus pneumoniae
45	c2wagG	Alignment	not modelled	14.6	25	PDB header: transcription Chain: G: PDB Molecule: dna-directed rna polymerase rpo8 subunit; PDBTitle: the complete structure of the archaeal 13-subunit dna-2 directed rna polymerase
46	d2okca1	Alignment	not modelled	13.9	26	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: N-6 DNA Methylase-like
47	c3fd5B	Alignment	not modelled	13.8	18	PDB header: transferase Chain: B: PDB Molecule: selenide, water dikinase 1; PDBTitle: crystal structure of human selenophosphate synthetase 12 complex with amppc
48	c3khkA	Alignment	not modelled	13.6	22	PDB header: dna binding protein Chain: A: PDB Molecule: type i restriction-modification system PDBTitle: crystal structure of type-i restriction-modification system2 methylation subunit (mm_0429) from methanosaarchina mazei.
49	d1h6za2	Alignment	not modelled	13.1	18	Fold: The "swivelling" beta/beta/alpha domain Superfamily: Phosphohistidine domain Family: Pyruvate phosphate dikinase, central domain
50	c3hvzb	Alignment	not modelled	12.9	14	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the tgs domain of the clolep_03100 protein from2 clostridium leptum, northeast structural genomics consortium target3 qlr13a
51	c2xh3B	Alignment	not modelled	12.7	16	PDB header: hydrolase Chain: B: PDB Molecule: spd1 nuclease; PDBTitle: extracellular nuclease
						PDB header: hydrolase

52	c2kmmA	Alignment	not modelled	11.9	13	Chain: A: PDB Molecule: guanosine-3',5'-bis(diphosphate) 3'- PDBTitle: solution nmr structure of the tgs domain of pg1808 from2 porphyromonas gingivalis. northeast structural genomics3 consortium target pgr122a (418-481)
53	d1n2aa2	Alignment	not modelled	11.3	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione S-transferase (GST), N-terminal domain
54	c2xznC	Alignment	not modelled	10.7	12	PDB header: ribosome Chain: C: PDB Molecule: kh domain containing protein; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2
55	c3p9nA	Alignment	not modelled	9.7	33	PDB header: transferase Chain: A: PDB Molecule: possible methyltransferase (methylase); PDBTitle: rv2966c of m. tuberculosis is a rsmd-like methyltransferase
56	c1wgqB	Alignment	not modelled	9.5	14	PDB header: isomerase Chain: B: PDB Molecule: phospho-sugar mutase; PDBTitle: crystal structure of pyrococcus horikoshii2 phosphomannomutase/phosphoglucosidase complexed with mg2+
57	d1twua	Alignment	not modelled	9.1	16	Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Hypothetical protein YycE
58	c3ghjA	Alignment	not modelled	9.0	4	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative integron gene cassette protein; PDBTitle: crystal structure from the mobile metagenome of halifax2 harbour sewage outfall: integron cassette protein hfx_cass4
59	c2ph0A	Alignment	not modelled	9.0	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the q6d2t7_ewrct protein from erwinia2 carotovora. nesg target ewr41.
60	d2hqva1	Alignment	not modelled	8.9	13	Fold: Heme iron utilization protein-like Superfamily: Heme iron utilization protein-like Family: ChuX-like
61	c3r6aB	Alignment	not modelled	8.8	12	PDB header: isomerase, lyase Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of an uncharacterized protein (hypothetical protein2 mm_3218) from methanosaerica mazae.
62	c2zifB	Alignment	not modelled	8.6	21	PDB header: transferase Chain: B: PDB Molecule: putative modification methylase; PDBTitle: crystal structure of ttha0409, putative dna modification2 methylase from thermus thermophilus hb8- complexed with s-3 adenosyl-l-methionine
63	d1g60a	Alignment	not modelled	8.5	46	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Type II DNA methylase
64	c2oviA	Alignment	not modelled	7.9	17	PDB header: ligand binding protein, metal transport Chain: A: PDB Molecule: hypothetical protein chux; PDBTitle: structure of the heme binding protein chux
65	d1p3da1	Alignment	not modelled	7.8	18	Fold: MurCD N-terminal domain Superfamily: MurCD N-terminal domain Family: MurCD N-terminal domain
66	d2bosa	Alignment	not modelled	7.7	17	Fold: OB-fold Superfamily: Bacterial enterotoxins Family: Bacterial AB5 toxins, B-subunits
67	d1booa	Alignment	not modelled	7.5	31	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Type II DNA methylase
68	c2f7IA	Alignment	not modelled	7.5	18	PDB header: isomerase Chain: A: PDB Molecule: 45aa long hypothetical phospho-sugar mutase; PDBTitle: crystal structure of sulfolobus tokodaii2 phosphomannomutase/phosphoglucosidase
69	c3m05A	Alignment	not modelled	7.4	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein pepe_1480; PDBTitle: the crystal structure of a functionally unknown protein2 pepe_1480 from pediococcus pentosaceus atcc 25745
70	c3s1sA	Alignment	not modelled	7.3	20	PDB header: hydrolase, transferase Chain: A: PDB Molecule: restriction endonuclease bpu31; PDBTitle: characterization and crystal structure of the type iig restriction2 endonuclease bpu31
71	d1wy7a1	Alignment	not modelled	6.4	20	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Ta1320-like
72	d1m7va	Alignment	not modelled	6.3	18	Fold: Nitric oxide (NO) synthase oxygenase domain Superfamily: Nitric oxide (NO) synthase oxygenase domain Family: Nitric oxide (NO) synthase oxygenase domain
73	d1ne2a	Alignment	not modelled	6.3	20	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Ta1320-like
74	c2fkdk	Alignment	not modelled	6.2	30	PDB header: transcription regulator Chain: K: PDB Molecule: repressor protein ci; PDBTitle: crystal structure of the c-terminal domain of bacteriophage2 186 repressor
75	d2hiya1	Alignment	not modelled	6.2	18	Fold: SP0830-like Superfamily: SP0830-like Family: SP0830-like
76	c3gm5A	Alignment	not modelled	6.2	15	PDB header: isomerase Chain: A: PDB Molecule: lactoylglutathione lyase and related lyases; PDBTitle: crystal structure of a putative methylmalonyl-coenzyme

						a2 epimerase from thermoanaerobacter tengcongensis at 2.0 a3 resolution
77	c2h8bB_		Alignment	not modelled	6.1	18 PDB header: hormone/growth factor Chain: B; PDB Molecule: insulin-like 3; PDBTitle: solution structure of insl3
78	d1j3aa_		Alignment	not modelled	6.1	10 Fold: Ribosomal protein L13 Superfamily: Ribosomal protein L13 Family: Ribosomal protein L13
79	d1nhy2		Alignment	not modelled	6.1	15 Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione S-transferase (GST), N-terminal domain
80	c1okgA_		Alignment	not modelled	6.0	20 PDB header: transferase Chain: A; PDB Molecule: possible 3-mercaptopyruvate sulfurtransferase; PDBTitle: 3-mercaptopyruvate sulfurtransferase from leishmania major
81	c1nw6A_		Alignment	not modelled	6.0	43 PDB header: transferase Chain: A; PDB Molecule: modification methylase rsri; PDBTitle: structure of the beta class n6-adenine dna methyltransferase rsri2 bound to sinefungin
82	d2esra1		Alignment	not modelled	5.9	40 Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: YhhF-like
83	c1c4gB_		Alignment	not modelled	5.6	12 PDB header: transferase Chain: B; PDB Molecule: protein (alpha-d-glucose 1-phosphate PDBTitle: phosphoglucomutase vanadate based transition state analog2 complex
84	d1hksa_		Alignment	not modelled	5.5	11 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Heat-shock transcription factor
85	d1xrka_		Alignment	not modelled	5.5	7 Fold: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Superfamily: Glyoxalase/Bleomycin resistance protein/Dihydroxybiphenyl dioxygenase Family: Antibiotic resistance proteins
86	d1autl1		Alignment	not modelled	5.4	43 Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: EGF/Laminin Family: EGF-type module
87	d1go4a_		Alignment	not modelled	5.4	18 Fold: The spindle assembly checkpoint protein mad2 Superfamily: The spindle assembly checkpoint protein mad2 Family: The spindle assembly checkpoint protein mad2
88	c2f40A_		Alignment	not modelled	5.3	22 PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein pf1455; PDBTitle: structure of a novel protein from backbone-centered nmr data and nmr-2 assisted structure prediction
89	d1xo8a_		Alignment	not modelled	5.2	24 Fold: Immunoglobulin-like beta-sandwich Superfamily: LEA14-like Family: LEA14-like