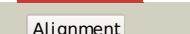
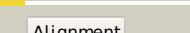
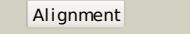
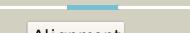
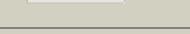


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0AA84
Date	Thu Jan 5 11:12:11 GMT 2012
Unique Job ID	f238f6596560a176

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3hsic_			100.0	15	PDB header: transferase Chain: C; PDB Molecule: phosphatidylserine synthase; PDBTitle: crystal structure of phosphatidylserine synthase haemophilus2 influenzae rd kw20
2	c1v0sa_			100.0	16	PDB header: hydrolase Chain: A; PDB Molecule: phospholipase d; PDBTitle: uninhibited form of phospholipase d from streptomyces sp.2 strain pmf
3	c1xdob_			100.0	17	PDB header: transferase Chain: B; PDB Molecule: polyphosphate kinase; PDBTitle: crystal structure of escherichia coli polyphosphate kinase
4	d1v0wa1			100.0	16	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Phospholipase D
5	d1xdpa3			99.9	15	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
6	d1byra_			99.9	19	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Nuclease
7	c2o8ra_			99.9	20	PDB header: transferase Chain: A; PDB Molecule: polyphosphate kinase; PDBTitle: crystal structure of polyphosphate kinase from2 porphyromonas gingivalis
8	d1v0wa2			99.9	16	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Phospholipase D
9	d2o8ra3			99.0	12	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
10	d1xdpa4			99.0	15	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
11	d2o8ra4			98.7	18	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain

12	c1q32C_			98.4	12	PDB header: replication,transcription,hydrolase Chain: C: PDB Molecule: tyrosyl-dna phosphodiesterase; PDBTitle: crystal structure analysis of the yeast tyrosyl-dna2 phosphodiesterase
13	c3sq3C_			98.1	13	PDB header: hydrolase Chain: C: PDB Molecule: tyrosyl-dna phosphodiesterase 1; PDBTitle: crystal structure analysis of the yeast tyrosyl-dna phosphodiesterase2 h182a mutant
14	c2c1IA_			97.7	25	PDB header: hydrolase Chain: A: PDB Molecule: restriction endonuclease; PDBTitle: structure of the bfii restriction endonuclease
15	d1jy1a2			96.8	23	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
16	c1nopB_			96.7	28	PDB header: hydrolase/dna Chain: B: PDB Molecule: tyrosyl-dna phosphodiesterase 1; PDBTitle: crystal structure of human tyrosyl-dna phosphodiesterase2 (tdp1) in complex with vanadate, dna and a human3 topoisomerase i-derived peptide
17	d1q32a2			96.4	29	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
18	d1qzqal			90.6	12	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
19	d1jy1a1			81.0	11	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
20	d2f5bx2			78.8	15	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: TrmB middle domain-like
21	c2f5tx_		not modelled	71.8	15	PDB header: transcription Chain: X: PDB Molecule: archaeal transcriptional regulator trmb; PDBTitle: crystal structure of the sugar binding domain of the archaeal2 transcriptional regulator trmb
22	d1q32a1		not modelled	66.5	10	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
23	c2i82A_		not modelled	42.6	19	PDB header: de novo protein Chain: A: PDB Molecule: designed protein or32; PDBTitle: solution nmr structure of de novo designed protein, p-loop ntpase2 fold, northeast structural genomics consortium target or32
24	c2a5hc_		not modelled	36.5	21	PDB header: isomerase Chain: C: PDB Molecule: l-lysine 2,3-aminomutase; PDBTitle: 2.1 angstrom x-ray crystal structure of lysine-2,3-aminomutase from2 clostridium subterminale sb4, with michaelis analog (l-alpha-lysine3 external aldimine form of pyridoxal-5'-phosphate).
25	d1o98a1		not modelled	34.2	26	Fold: 2,3-Bisphosphoglycerate-independent phosphoglycerate mutase, substrate-binding domain Superfamily: 2,3-Bisphosphoglycerate-independent phosphoglycerate mutase, substrate-binding domain Family: 2,3-Bisphosphoglycerate-independent phosphoglycerate mutase, substrate-binding domain
26	c2o48X_		not modelled	30.1	12	PDB header: oxidoreductase Chain: X: PDB Molecule: dimeric dihydrodiol dehydrogenase; PDBTitle: crystal structure of mammalian dimeric dihydrodiol dehydrogenase
27	d1rvga_		not modelled	28.0	25	Fold: TIM beta/alpha-barrel Superfamily: Alcohol dehydrogenase Family: Class II FBP aldolase

28	d1gvfa	Alignment	not modelled	26.2	15	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class II FBP aldolase
29	d1gz0a2	Alignment	not modelled	20.0	24	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: RNA 2'-O ribose methyltransferase substrate binding domain
30	c2hqbA	Alignment	not modelled	17.8	15	PDB header: transcription Chain: A: PDB Molecule: transcriptional activator of comk gene; PDBTitle: crystal structure of a transcriptional activator of comk2 gene from bacillus halodurans
31	c1t3gB	Alignment	not modelled	17.3	18	PDB header: membrane protein Chain: B: PDB Molecule: x-linked interleukin-1 receptor accessory PDBTitle: crystal structure of the toll/interleukin-1 receptor (tir)2 domain of human il-1rapl
32	c3dy0B	Alignment	not modelled	16.7	33	PDB header: blood clotting, hydrolase inhibitor Chain: B: PDB Molecule: c-terminus plasma serine protease inhibitor; PDBTitle: crystal structure of cleaved pci bound to heparin
33	c3kgkA	Alignment	not modelled	16.2	13	PDB header: chaperone Chain: A: PDB Molecule: arsenical resistance operon trans-acting repressor arsd; PDBTitle: crystal structure of arsd
34	c3rfuC	Alignment	not modelled	15.5	21	PDB header: hydrolase, membrane protein Chain: C: PDB Molecule: copper efflux atpase; PDBTitle: crystal structure of a copper-transporting pib-type atpase
35	c3ecsD	Alignment	not modelled	15.5	13	PDB header: translation Chain: D: PDB Molecule: translation initiation factor eif-2b subunit PDBTitle: crystal structure of human eif2b alpha
36	c1lq8H	Alignment	not modelled	15.4	33	PDB header: blood clotting Chain: H: PDB Molecule: plasma serine protease inhibitor; PDBTitle: crystal structure of cleaved protein c inhibitor
37	c2rjoA	Alignment	not modelled	15.1	16	PDB header: signaling protein Chain: A: PDB Molecule: twin-arginine translocation pathway signal protein; PDBTitle: crystal structure of twin-arginine translocation pathway signal2 protein from burkholderia phytopharmans
38	c3gbcA	Alignment	not modelled	15.1	19	PDB header: hydrolase Chain: A: PDB Molecule: pyrazinamidase/nicotinamidas pnca; PDBTitle: determination of the crystal structure of the pyrazinamidase from m. tuberculosis : a structure-function analysis for prediction3 resistance to pyrazinamide
39	c2nytB	Alignment	not modelled	14.4	12	PDB header: hydrolase Chain: B: PDB Molecule: probable c->u-editing enzyme apobec-2; PDBTitle: the apobec2 crystal structure and functional implications2 for aid
40	d1gz0f2	Alignment	not modelled	14.2	24	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: RNA 2'-O ribose methyltransferase substrate binding domain
41	c3db2C	Alignment	not modelled	13.7	10	PDB header: oxidoreductase Chain: C: PDB Molecule: putative nadph-dependent oxidoreductase; PDBTitle: crystal structure of a putative nadph-dependent oxidoreductase2 (dhaf_2064) from desulfobacterium hafniense dcb-2 at 1.70 a3 resolution
42	c3s99A	Alignment	not modelled	13.2	19	PDB header: lipid binding protein Chain: A: PDB Molecule: basic membrane lipoprotein; PDBTitle: crystal structure of a basic membrane lipoprotein from brucella2 melitensis, iodide soak
43	c3h75A	Alignment	not modelled	12.4	10	PDB header: sugar binding protein Chain: A: PDB Molecule: periplasmic sugar-binding domain protein; PDBTitle: crystal structure of a periplasmic sugar-binding protein from the2 pseudomonas fluorescens
44	c2kjwA	Alignment	not modelled	11.9	12	PDB header: ribosomal protein Chain: A: PDB Molecule: 30s ribosomal protein s6; PDBTitle: solution structure and backbone dynamics of the permutant2 p54-55
45	d1bdga1	Alignment	not modelled	11.9	15	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
46	c1o98A	Alignment	not modelled	11.1	26	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
47	d1acoa2	Alignment	not modelled	11.0	14	Fold: Aconitase iron-sulfur domain Superfamily: Aconitase iron-sulfur domain Family: Aconitase iron-sulfur domain
48	d2obba1	Alignment	not modelled	11.0	11	Fold: HAD-like Superfamily: HAD-like Family: BT0820-like
49	c2q4eb	Alignment	not modelled	10.8	11	PDB header: oxidoreductase Chain: B: PDB Molecule: probable oxidoreductase at4g09670; PDBTitle: ensemble refinement of the protein crystal structure of gene product2 from arabidopsis thaliana at4g09670
50	c2glxD	Alignment	not modelled	9.9	13	PDB header: oxidoreductase Chain: D: PDB Molecule: 1,5-anhydro-d-fructose reductase; PDBTitle: crystal structure analysis of bacterial 1,5-af reductase
51	c2kl8A	Alignment	not modelled	9.4	24	PDB header: de novo protein Chain: A: PDB Molecule: or15; PDBTitle: solution nmr structure of de novo designed ferredoxin-like2 fold protein, northeast structural genomics consortium3 target or15
52	c3igzB	Alignment	not modelled	9.3	26	PDB header: isomerase Chain: B: PDB Molecule: cofactor-independent phosphoglycerate mutase;

						PDBTitle: crystal structures of leishmania mexicana phosphoglycerate2 mutase at low cobalt concentration
53	d1un8a4	Alignment	not modelled	9.2	16	Fold: DAK1/DegV-like Superfamily: DAK1/DegV-like Family: DAK1
54	d1vb5a	Alignment	not modelled	9.2	15	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2-like
55	c2r60A	Alignment	not modelled	8.8	28	PDB header: transferase Chain: A: PDB Molecule: glycosyl transferase, group 1; PDBTitle: structure of apo sucrose phosphate synthase (sps) of2 halothermothrix orenii
56	c2ixaA	Alignment	not modelled	8.4	13	PDB header: hydrolase Chain: A: PDB Molecule: alpha-n-acetylgalactosaminidase; PDBTitle: a-zyme, n-acetylgalactosaminidase
57	c2b34C	Alignment	not modelled	8.3	21	PDB header: hydrolase Chain: C: PDB Molecule: mar1 ribonuclease; PDBTitle: structure of mar1 ribonuclease from caenorhabditis elegans
58	d1ydwa1	Alignment	not modelled	8.2	10	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
59	d1x94a	Alignment	not modelled	8.2	13	Fold: SIS domain Superfamily: SIS domain Family: mono-SIS domain
60	c3ozIB	Alignment	not modelled	8.0	20	PDB header: plant protein Chain: B: PDB Molecule: l6tr; PDBTitle: crystal structure of the tir domain from the flax disease resistance2 protein l6
61	c2wltA	Alignment	not modelled	7.9	18	PDB header: hydrolase Chain: A: PDB Molecule: l-asparaginase; PDBTitle: the crystal structure of helicobacter pylori l-asparaginase2 at 1.4 a resolution
62	c2klnA	Alignment	not modelled	7.7	11	PDB header: transport protein Chain: A: PDB Molecule: probable sulphate-transport transmembrane protein, cog0659; PDBTitle: solution structure of stas domain of rv1739c from m. tuberculosis
63	c2x7mA	Alignment	not modelled	7.7	8	PDB header: hydrolase Chain: A: PDB Molecule: archaemetzincin; PDBTitle: crystal structure of archaemetzincin (amza) from methanopyrus2 kandleri at 1.5 a resolution
64	c3l2iB	Alignment	not modelled	7.5	12	PDB header: lyase Chain: B: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: 1.85 angstrom crystal structure of the 3-dehydroquinate dehydratase2 (arod) from salmonella typhimurium lt2.
65	c2krca	Alignment	not modelled	7.4	8	PDB header: transcription Chain: A: PDB Molecule: dna-directed rna polymerase subunit delta; PDBTitle: solution structure of the n-terminal domain of bacillus2 subtilis delta subunit of rna polymerase
66	c2j37W	Alignment	not modelled	7.1	11	PDB header: ribosome Chain: W: PDB Molecule: signal recognition particle 54 kda protein PDBTitle: model of mammalian srp bound to 80s rncs
67	d1yaca	Alignment	not modelled	7.1	21	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
68	c3a11D	Alignment	not modelled	6.9	17	PDB header: isomerase Chain: D: PDB Molecule: translation initiation factor eif-2b, delta PDBTitle: crystal structure of ribose-1,5-bisphosphate isomerase from2 thermococcus kodakaraensis kod1
69	c2y92A	Alignment	not modelled	6.7	10	PDB header: immune system Chain: A: PDB Molecule: toll/interleukin-1 receptor domain-containing adapter PDBTitle: crystal structure of mal adaptor protein
70	c3euwB	Alignment	not modelled	6.6	12	PDB header: oxidoreductase Chain: B: PDB Molecule: myo-inositol dehydrogenase; PDBTitle: crystal structure of a myo-inositol dehydrogenase from corynebacterium2 glutamicum atcc 13032
71	c1yd6A	Alignment	not modelled	6.6	20	PDB header: dna binding protein Chain: A: PDB Molecule: uvrc; PDBTitle: crystal structure of the giy-yig n-terminal endonuclease2 domain of uvrc from bacillus caldotenax
72	c2d6fA	Alignment	not modelled	6.6	14	PDB header: ligase/rna Chain: A: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit d; PDBTitle: crystal structure of glu-trna(gln) amidotransferase in the2 complex with trna(gln)
73	d1v4sa1	Alignment	not modelled	6.5	20	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
74	c5acnA	Alignment	not modelled	6.4	16	PDB header: lyase(carbon-oxygen) Chain: A: PDB Molecule: aconitase; PDBTitle: structure of activated aconitase. formation of the (4fe-4s)2 cluster in the crystal
75	c2iksA	Alignment	not modelled	6.2	11	PDB header: transcription Chain: A: PDB Molecule: dna-binding transcriptional dual regulator; PDBTitle: crystal structure of n-terminal truncated dna-binding transcriptional2 dual regulator from escherichia coli k12
76	d1nnsa	Alignment	not modelled	6.2	19	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
77	c3brsA	Alignment	not modelled	6.2	17	PDB header: transport protein Chain: A: PDB Molecule: periplasmic binding protein/laci transcriptional regulator;

						PDBTitle: crystal structure of sugar transporter from clostridium2 phytofermentans
78	c3hvbB_	Alignment	not modelled	6.1	14	PDB header: hydrolase Chain: B; PDB Molecule: protein fimx; PDBTitle: crystal structure of the dual-domain ggdef-eal module of2 fimx from pseudomonas aeruginosa
79	c3pm6B_	Alignment	not modelled	5.8	16	PDB header: lyase Chain: B; PDB Molecule: putative fructose-bisphosphate aldolase; PDBTitle: crystal structure of a putative fructose-1,6-biphosphate aldolase from2 coccidioides immitis solved by combined sad mr
80	c3i5mA_	Alignment	not modelled	5.8	18	PDB header: oxidoreductase Chain: A; PDB Molecule: putative leucoanthocyanidin reductase 1; PDBTitle: structure of the apo form of leucoanthocyanidin reductase from vitis2 vinifera
81	c1l5jB_	Alignment	not modelled	5.7	16	PDB header: lyase Chain: B; PDB Molecule: aconitate hydratase 2; PDBTitle: crystal structure of e. coli aconitase b.
82	c3q2kB_	Alignment	not modelled	5.7	16	PDB header: oxidoreductase Chain: B; PDB Molecule: oxidoreductase; PDBTitle: crystal structure of the wiba dehydrogenase from bordetella pertussis2 in complex with nadh and udp-glcna
83	d2galf1	Alignment	not modelled	5.7	12	Fold: Ferredoxin-like Superfamily: Ribosomal protein S6 Family: Ribosomal protein S6
84	c2qbbF_	Alignment	not modelled	5.7	12	PDB header: ribosome Chain: F; PDB Molecule: 30s ribosomal protein s6; PDBTitle: crystal structure of the bacterial ribosome from2 escherichia coli in complex with gentamicin. this file3 contains the 30s subunit of the second 70s ribosome, with4 gentamicin bound. the entire crystal structure contains5 two 70s ribosomes and is described in remark 400.
85	d1x9ga_	Alignment	not modelled	5.6	11	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
86	c3ezyB_	Alignment	not modelled	5.5	13	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: dehydrogenase; PDBTitle: crystal structure of probable dehydrogenase tm_0414 from2 thermotoga maritima
87	d2b5ic2	Alignment	not modelled	5.4	33	Fold: Immunoglobulin-like beta-sandwich Superfamily: Fibronectin type III Family: Fibronectin type III
88	c3brqA_	Alignment	not modelled	5.3	13	PDB header: transcription regulator Chain: A; PDB Molecule: hth-type transcriptional regulator ascg; PDBTitle: crystal structure of the escherichia coli transcriptional repressor2 ascg
89	c3bleA_	Alignment	not modelled	5.3	10	PDB header: transferase Chain: A; PDB Molecule: citramalate synthase from leptospira interrogans; PDBTitle: crystal structure of the catalytic domain of licms in2 complexed with malonate
90	c3ktbD_	Alignment	not modelled	5.2	21	PDB header: transcription regulator Chain: D; PDB Molecule: arsenical resistance operon trans-acting repressor; PDBTitle: crystal structure of arsenical resistance operon trans-acting2 repressor from bacteroides vulgatus atcc 8482
91	c3c8fA_	Alignment	not modelled	5.1	12	PDB header: oxidoreductase Chain: A; PDB Molecule: pyruvate formate-lyase 1-activating enzyme; PDBTitle: 4fe-4s-pyruvate formate-lyase activating enzyme with2 partially disordered adomet