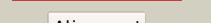
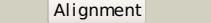
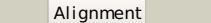
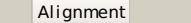
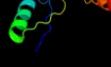
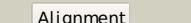
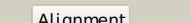
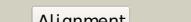
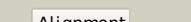
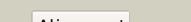
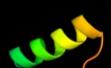
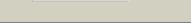
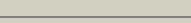
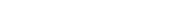


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P32169
Date	Thu Jan 5 11:49:47 GMT 2012
Unique Job ID	dce8e934e642c4d9

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1ojra_			100.0	100	Fold: AraD/HMP-PK domain-like Superfamily: AraD/HMP-PK domain-like Family: AraD-like aldolase/epimerase
2	d1pvta_			100.0	24	Fold: AraD/HMP-PK domain-like Superfamily: AraD/HMP-PK domain-like Family: AraD-like aldolase/epimerase
3	d1e4cp_			100.0	19	Fold: AraD/HMP-PK domain-like Superfamily: AraD/HMP-PK domain-like Family: AraD-like aldolase/epimerase
4	c3ocra_			100.0	20	PDB header: lyase Chain: A: PDB Molecule: class ii aldolase/adducin domain protein; PDBTitle: crystal structure of aldolase ii superfamily protein from pseudomonas2 syringae
5	c2opiB_			100.0	20	PDB header: lyase Chain: B: PDB Molecule: l-fuculose-1-phosphate aldolase; PDBTitle: crystal structure of l-fuculose-1-phosphate aldolase from bacteroides2 thetaiotaomicron
6	c2z7bA_			100.0	18	PDB header: lyase Chain: A: PDB Molecule: mlr6791 protein; PDBTitle: crystal structure of mesorhizobium loti 3-hydroxy-2-methylpyridine-4,2 5-dicarboxylate decarboxylase
7	d1k0wa_			100.0	16	Fold: AraD/HMP-PK domain-like Superfamily: AraD/HMP-PK domain-like Family: AraD-like aldolase/epimerase
8	c2fk5B_			100.0	25	PDB header: lyase Chain: B: PDB Molecule: fuculose-1-phosphate aldolase; PDBTitle: crystal structure of l-fuculose-1-phosphate aldolase from thermus2 thermophilus hb8
9	c2irpA_			100.0	17	PDB header: lyase Chain: A: PDB Molecule: putative aldolase class 2 protein aq_1979; PDBTitle: crystal structure of the l-fuculose-1-phosphate aldolase (aq_1979)2 from aquifex aeolicus vf5
10	c3m4rA_			100.0	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: structure of the n-terminal class ii aldolase domain of a conserved2 protein from thermoplasma acidophilum
11	d1w9ya1			61.5	8	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Penicillin synthase-like

12	d1gp6a_			59.9	10	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Penicillin synthase-like	
13	c3on7C_			49.8	2	PDB header: oxidoreductase Chain: C: PDB Molecule: oxidoreductase, iron/ascorbate family; PDBTitle: crystal structure of a putative oxygenase (so_2589) from shewanella2 oneidensis at 2.20 a resolution	
14	d1dcfa_			48.0	10	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Penicillin synthase-like	
15	d1odma_			46.5	11	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Penicillin synthase-like	
16	d1eucb2			39.1	13	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: Succinyl-CoA synthetase, beta-chain, N-terminal domain	
17	c2zytA_			32.5	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative uncharacterized protein ttha1756; PDBTitle: crystal structure of uncharacterized conserved protein from thermus2 thermophilus hb8	
18	d1nz8a_			29.6	19	Fold: Ferredoxin-like Superfamily: N-utilization substance G protein NusG, N-terminal domain Family: N-utilization substance G protein NusG, N-terminal domain	
19	d1gjja2			28.0	24	Fold: LEM/SAP HeH motif Superfamily: LEM domain Family: LEM domain	
20	c3ooxA_			25.8	3	PDB header: oxidoreductase Chain: A: PDB Molecule: putative 2og-fe(ii) oxygenase family protein; PDBTitle: crystal structure of a putative 2og-fe(ii) oxygenase family protein2 (cc_0200) from caulobacter crescentus at 1.44 a resolution	
21	c3p45F_		Alignment	not modelled	20.1	23	PDB header: hydrolase Chain: F: PDB Molecule: caspase-6; PDBTitle: crystal structure of apo-caspase-6 at physiological ph
22	d2odgc1		Alignment	not modelled	19.1	31	Fold: LEM/SAP HeH motif Superfamily: LEM domain Family: LEM domain
23	d1jeia_		Alignment	not modelled	18.7	24	Fold: LEM/SAP HeH motif Superfamily: LEM domain Family: LEM domain
24	d1luaa2		Alignment	not modelled	17.8	11	Fold: Aminoacid dehydrogenase-like, N-terminal domain Superfamily: Aminoacid dehydrogenase-like, N-terminal domain Family: Methylene-tetrahydromethanopterin dehydrogenase
25	c2h51B_		Alignment	not modelled	17.6	23	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: caspase-1; PDBTitle: crystal structure of human caspase-1 (glu390->asp and arg286->lys) in2 complex with 3-[2-(2-benzylloxycarbonylamoно-3-methyl-butrylamino)-3 propionylamino]-4-oxo-pentanoic acid (z-vad-fmk)
26	d2pw6a1		Alignment	not modelled	17.2	15	Fold: Phosphorylase/hydrolase-like Superfamily: LigB-like Family: LigB-like
27	c2pmzV_		Alignment	not modelled	16.8	20	PDB header: translation, transferase Chain: V: PDB Molecule: dna-directed rna polymerase subunit h; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus
28	d1dzfa2		Alignment	not modelled	16.5	28	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5

29	d1wi9a	Alignment	not modelled	16.1	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PCI domain (PINT motif)
30	c2cleB	Alignment	not modelled	15.8	31	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: caspase-3 subunit p12; PDBTitle: crystal structures of caspase-3 in complex with aza-peptide michael2 acceptor inhibitors.
31	c2ra9A	Alignment	not modelled	15.4	23	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein duf1285; PDBTitle: crystal structure of a duf1285 family protein (sbal_2486) from2 shewanella baltica os155 at 1.40 a resolution
32	c2p2cD	Alignment	not modelled	15.0	15	PDB header: hydrolase Chain: D: PDB Molecule: caspase-2; PDBTitle: inhibition of caspase-2 by a designed ankyrin repeat2 protein (darpin)
33	c2qs0A	Alignment	not modelled	14.1	5	PDB header: biosynthetic protein Chain: A: PDB Molecule: quinolinate synthetase a; PDBTitle: quinolinate synthase from pyrococcus furiosus
34	d1hmja	Alignment	not modelled	14.0	22	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5
35	c3sipB	Alignment	not modelled	14.0	31	PDB header: hydrolase/ligase/hydrolase Chain: B: PDB Molecule: caspase; PDBTitle: crystal structure of drice and diap1-bir1 complex
36	d1eika	Alignment	not modelled	13.7	17	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5
37	c2c2zB	Alignment	not modelled	13.6	17	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: caspase-8 p10 subunit; PDBTitle: crystal structure of caspase-8 in complex with aza-peptide michael2 acceptor inhibitor
38	d1j5ua	Alignment	not modelled	13.4	25	Fold: MTH1598-like Superfamily: MTH1598-like Family: MTH1598-like
39	d2bfdb2	Alignment	not modelled	13.4	10	Fold: TK C-terminal domain-like Superfamily: TK C-terminal domain-like Family: Branched-chain alpha-keto acid dehydrogenase beta-subunit, C-terminal-domain
40	d1h9fa	Alignment	not modelled	12.9	24	Fold: LEM/SAP HeH motif Superfamily: LEM domain Family: LEM domain
41	d2d6fa1	Alignment	not modelled	12.7	8	Fold: Sm-like fold Superfamily: GatD N-terminal domain-like Family: GatD N-terminal domain-like
42	c3fmyA	Alignment	not modelled	12.6	17	PDB header: dna binding protein Chain: A: PDB Molecule: hth-type transcriptional regulator mqsa PDBTitle: structure of the c-terminal domain of the e. coli protein2 mqsa (ygit/b3021)
43	c2qljB	Alignment	not modelled	12.4	38	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: caspase-7; PDBTitle: crystal structure of caspase-7 with inhibitor ac-wehd-cho
44	d1e0fi	Alignment	not modelled	11.3	30	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Leech antihemostatic proteins Family: Hirudin-like
45	c1e0fl	Alignment	not modelled	11.3	30	PDB header: coagulation/crystal structure/heparin-b Chain: I: PDB Molecule: haemadin; PDBTitle: crystal structure of the human alpha-thrombin-haemadin2 complex: an exosite ii-binding inhibitor
46	c3b1qD	Alignment	not modelled	11.3	26	PDB header: transferase Chain: D: PDB Molecule: ribokinase, putative; PDBTitle: structure of burkholderia thailandensis nucleoside kinase (bthnk) in2 complex with inosine
47	d1ikpa2	Alignment	not modelled	11.1	27	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: ADP-ribosylating toxins
48	c1eucB	Alignment	not modelled	11.1	17	PDB header: ligase Chain: B: PDB Molecule: succinyl-coa synthetase, beta chain; PDBTitle: crystal structure of dephosphorylated pig heart, gtp-2 specific succinyl-coa synthetase
49	d1jw3a	Alignment	not modelled	10.8	31	Fold: MTH1598-like Superfamily: MTH1598-like Family: MTH1598-like
50	d1wzua1	Alignment	not modelled	10.7	0	Fold: NadA-like Superfamily: NadA-like Family: NadA-like
51	c1e0fl	Alignment	not modelled	10.7	30	PDB header: coagulation/crystal structure/heparin-b Chain: J: PDB Molecule: haemadin; PDBTitle: crystal structure of the human alpha-thrombin-haemadin2 complex: an exosite ii-binding inhibitor
52	d1m1ha2	Alignment	not modelled	10.7	22	Fold: Ferrodoxin-like Superfamily: N-utilization substance G protein NusG, N-terminal domain Family: N-utilization substance G protein NusG, N-terminal domain
53	c3r1fO	Alignment	not modelled	10.7	16	PDB header: transcription Chain: O: PDB Molecule: esx-1 secretion-associated regulator espr; PDBTitle: crystal structure of a key regulator of virulence in mycobacterium2 tuberculosis
54	c3kv4A	Alignment	not modelled	10.5	4	PDB header: h3k4me3 binding protein, transferase Chain: A: PDB Molecule: phd finger protein 8; PDBTitle: structure of phf8 in complex with histone h3
55	c3s6ba	Alignment	not modelled	10.4	26	PDB header: hydrolase Chain: A: PDB Molecule: methionine aminopeptidase; PDBTitle: crystal structure of methionine aminopeptidase 1b from

					plasmodium2 falciparum, pf10_0150
56	d1dwka1	Alignment	not modelled	10.4	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Cyanase N-terminal domain
57	d2nu7b2	Alignment	not modelled	10.2	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: Succinyl-CoA synthetase, beta-chain, N-terminal domain
58	d1ig4a_	Alignment	not modelled	10.2	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
59	d1kx5b_	Alignment	not modelled	10.0	Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
60	d1gvfa_	Alignment	not modelled	9.9	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class II FBP aldolase
61	d1alna1	Alignment	not modelled	9.6	Fold: Cytidine deaminase-like Superfamily: Cytidine deaminase-like Family: Cytidine deaminase
62	d1qk9a_	Alignment	not modelled	9.5	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
63	c2nu9E_	Alignment	not modelled	9.4	PDB header: ligase Chain: E: PDB Molecule: succinyl-coa synthetase beta chain; PDBTitle: c123at mutant of e. coli succinyl-coa synthetase2 orthorhombic crystal form
64	d1w85b2	Alignment	not modelled	9.3	Fold: TK C-terminal domain-like Superfamily: TK C-terminal domain-like Family: Branched-chain alpha-keto acid dehydrogenase beta-subunit, C-terminal-domain
65	c1e0fK_	Alignment	not modelled	9.1	PDB header: coagulation/crystal structure/heparin-b Chain: K: PDB Molecule: haemadin; PDBTitle: crystal structure of the human alpha-thrombin-haemadin2 complex: an exosite ii-binding inhibitor
66	d1u5tb1	Alignment	not modelled	8.9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
67	c3pvjB_	Alignment	not modelled	8.6	PDB header: oxidoreductase Chain: B: PDB Molecule: alpha-ketoglutarate-dependent taurine dioxygenase; PDBTitle: crystal structure of the fe(iii)/alpha-ketoglutarate dependent taurine2 dioxygenase from pseudomonas putida kt2440
68	c2ky8A_	Alignment	not modelled	8.6	PDB header: transcription/dna Chain: A: PDB Molecule: methyl-cpg-binding domain protein 2; PDBTitle: solution structure and dynamic analysis of chicken mbd2 methyl binding2 domain bound to a target methylated dna sequence
69	c2z5wA_	Alignment	not modelled	8.5	PDB header: structural protein Chain: A: PDB Molecule: bclA protein; PDBTitle: bclA, a recombinant spore surface protein from bacillus anthracis
70	c3h02F_	Alignment	not modelled	8.5	PDB header: lyase Chain: F: PDB Molecule: naphthoate synthase; PDBTitle: 2.15 angstrom resolution crystal structure of naphthoate synthase from2 salmonella typhimurium.
71	d1zq1c2	Alignment	not modelled	8.2	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
72	c3ju3A_	Alignment	not modelled	8.2	PDB header: oxidoreductase Chain: A: PDB Molecule: probable 2-oxoacid ferredoxin oxidoreductase, alpha chain; PDBTitle: crystal structure of alpha chain of probable 2-oxoacid ferredoxin2 oxidoreductase from thermoplasma acidophilum
73	c3ox4D_	Alignment	not modelled	8.0	PDB header: oxidoreductase Chain: D: PDB Molecule: alcohol dehydrogenase 2; PDBTitle: structures of iron-dependent alcohol dehydrogenase 2 from zymomonas2 mobilis zm4 complexed with nad cofactor
74	d2a6aa2	Alignment	not modelled	7.9	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: YeaZ-like
75	d1ub1a_	Alignment	not modelled	7.9	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: Methyl-CpG-binding domain, MBD
76	d1rrma_	Alignment	not modelled	7.8	Fold: Dehydroquinate synthase-like Superfamily: Dehydroquinate synthase-like Family: Iron-containing alcohol dehydrogenase
77	d1uasa1	Alignment	not modelled	7.8	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
78	d1o2da_	Alignment	not modelled	7.5	Fold: Dehydroquinate synthase-like Superfamily: Dehydroquinate synthase-like Family: Iron-containing alcohol dehydrogenase
79	d1a9xa5	Alignment	not modelled	7.3	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: BC ATP-binding domain-like
80	d2huec1	Alignment	not modelled	7.3	Fold: Histone-fold Superfamily: Histone-fold Family: Nucleosome core histones
81	c3g94B_	Alignment	not modelled	7.2	PDB header: lyase Chain: B: PDB Molecule: fructose-bisphosphate aldolase, class ii; PDBTitle: the crystal structure of fructose 1,6-bisphosphate aldolase from2 bacillus anthracis str. 'ames ancestor'

82	d1rvga_	Alignment	not modelled	7.0	8	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class II FBP aldolase
83	d2d6fc2	Alignment	not modelled	6.9	22	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
84	c1v8gB_	Alignment	not modelled	6.6	11	PDB header: transferase Chain: B: PDB Molecule: anthranilate phosphoribosyltransferase; PDBTitle: crystal structure of anthranilate phosphoribosyltransferase2 (trpd) from thermus thermophilus hb8
85	c1wcka_	Alignment	not modelled	6.6	18	PDB header: structural protein Chain: A: PDB Molecule: bcla protein; PDBTitle: crystal structure of the c-terminal domain of bcla, the2 major antigen of the exosporium of the bacillus anthracis3 spore.
86	c3p04A_	Alignment	not modelled	6.6	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium glutamicum2 northeast structural genomics consortium target cgr8
87	c1w7vD_	Alignment	not modelled	6.5	25	PDB header: hydrolase Chain: D: PDB Molecule: xaa-pro aminopeptidase; PDBTitle: znmg substituted aminopeptidase p from e. coli
88	c3alyF_	Alignment	not modelled	6.5	20	PDB header: ribosomal protein Chain: F: PDB Molecule: 50s ribosomal protein p1 (l12p); PDBTitle: the structure of protein complex
89	c1olsB_	Alignment	not modelled	6.4	10	PDB header: oxidoreductase Chain: B: PDB Molecule: 2-oxoisovalerate dehydrogenase beta subunit; PDBTitle: roles of his291-alpha and his146-beta' in the reductive2 acylation reaction catalyzed by human branched-chain3 alpha-ketoacid dehydrogenase
90	c3p04B_	Alignment	not modelled	6.3	14	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized bcr; PDBTitle: crystal structure of the bcr protein from corynebacterium glutamicum2 northeast structural genomics consortium target cgr8
91	d1hzda_	Alignment	not modelled	6.2	20	Fold: ClpP/crotonase Superfamily: ClpP/crotonase Family: Crotonase-like
92	c3h0gE_	Alignment	not modelled	6.1	20	PDB header: transcription Chain: E: PDB Molecule: dna-directed rna polymerases i, ii, and iii PDBTitle: rna polymerase ii from schizosaccharomyces pombe
93	c3q2oB_	Alignment	not modelled	6.0	10	PDB header: lyase Chain: B: PDB Molecule: phosphoribosylaminoimidazole carboxylase, atpase subunit; PDBTitle: crystal structure of purk: n5-carboxyaminoimidazole ribonucleotide2 synthetase
94	d1hj3a1	Alignment	not modelled	5.8	17	Fold: Cytochrome c Superfamily: Cytochrome c Family: N-terminal (heme c) domain of cytochrome cd1-nitrite reductase
95	d1b4ub_	Alignment	not modelled	5.8	13	Fold: Phosphorylase/hydrolase-like Superfamily: LigB-like Family: LigB-like
96	c2qlcC_	Alignment	not modelled	5.7	10	PDB header: dna binding protein Chain: C: PDB Molecule: dna repair protein radc homolog; PDBTitle: the crystal structure of dna repair protein radc from chlorobium2 tepidum tis
97	d2d69a1	Alignment	not modelled	5.6	16	Fold: TIM beta/alpha-barrel Superfamily: RuBisCo, C-terminal domain Family: RuBisCo, large subunit, C-terminal domain
98	c3bfjK_	Alignment	not modelled	5.5	12	PDB header: oxidoreductase Chain: K: PDB Molecule: 1,3-propanediol oxidoreductase; PDBTitle: crystal structure analysis of 1,3-propanediol oxidoreductase
99	c2k06A_	Alignment	not modelled	5.4	28	PDB header: transcription Chain: A: PDB Molecule: transcription antitermination protein nusg; PDBTitle: solution structure of the aminoterminal domain of e. coli2 nusg