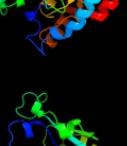
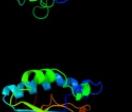
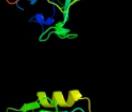


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0ADI7
Date	Thu Jan 5 11:21:06 GMT 2012
Unique Job ID	bf4157d84899c692

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1j2ra_	Alignment		100.0	99	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
2	d1nbaa_	Alignment		100.0	21	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
3	c2fq1A_	Alignment		100.0	21	PDB header: hydrolase Chain: A: PDB Molecule: isochorismatase; PDBTitle: crystal structure of the two-domain non-ribosomal peptide synthetase2 entb containing isochorismate lyase and aryl-carrier protein domains
4	c3irvA_	Alignment		100.0	24	PDB header: hydrolase Chain: A: PDB Molecule: cysteine hydrolase; PDBTitle: crystal structure of cysteine hydrolase pspph_2384 from pseudomonas2 syringae pv. phaseolicola 1448a
5	c3kl2K_	Alignment		100.0	30	PDB header: structural genomics, unknown function Chain: K: PDB Molecule: putative isochorismatase; PDBTitle: crystal structure of a putative isochorismatase from streptomyces2 avermitilis
6	d1nf9a_	Alignment		100.0	21	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
7	c3mcwA_	Alignment		100.0	30	PDB header: hydrolase Chain: A: PDB Molecule: putative hydrolase; PDBTitle: crystal structure of an a putative hydrolase of the isochorismatase2 family (cv_1320) from chromobacterium violaceum atcc 12472 at 1.06 a3 resolution
8	c3hu5B_	Alignment		100.0	27	PDB header: hydrolase Chain: B: PDB Molecule: isochorismatase family protein; PDBTitle: crystal structure of isochorismatase family protein from desulfovibrio2 vulgaris subsp. vulgaris str. hildenborough
9	c3ot4F_	Alignment		100.0	21	PDB header: hydrolase Chain: F: PDB Molecule: putative isochorismatase; PDBTitle: structure and catalytic mechanism of bordetella bronchiseptica ncifc
10	c3hb7G_	Alignment		100.0	21	PDB header: hydrolase Chain: G: PDB Molecule: isochorismatase hydrolase; PDBTitle: the crystal structure of an isochorismatase-like hydrolase from2 alkaliphilus metallireducens to 2.3a
11	c3oqpA_	Alignment		100.0	29	PDB header: hydrolase Chain: A: PDB Molecule: putative isochorismatase; PDBTitle: crystal structure of a putative isochorismatase (bxe_a0706) from2 burkholderia xenovorans lb400 at 1.22 a resolution

12	c3oqpB	Alignment		100.0	29	PDB header: hydrolase Chain: B: PDB Molecule: putative isochorismatase; PDBTitle: crystal structure of a putative isochorismatase (bxe_a0706) from2 burkholderia xenovorans lb400 at 1.22 a resolution
13	c3eefA	Alignment		100.0	27	PDB header: hydrolase Chain: A: PDB Molecule: n-carbamoylsarcosine amidase related protein; PDBTitle: crystal structure of n-carbamoylsarcosine amidase from thermoplasma2 acidophilum
14	c3r2jC	Alignment		100.0	16	PDB header: hydrolase Chain: C: PDB Molecule: alpha/beta-hydrolase-like protein; PDBTitle: crystal structure of pnc1 from l. infantum in complex with nicotinate
15	c2wtaA	Alignment		100.0	24	PDB header: hydrolase Chain: A: PDB Molecule: nicotinamidase; PDBTitle: acinetobacter baumanii nicotinamidase pyrazinamidease
16	d1im5a	Alignment		100.0	22	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
17	c3o93A	Alignment		100.0	25	PDB header: hydrolase Chain: A: PDB Molecule: nicotinamidase; PDBTitle: high resolution crystal structures of streptococcus pneumoniae2 nicotinamidase with trapped intermediates provide insights into3 catalytic mechanism and inhibition by aldehydes
18	c3lqyA	Alignment		100.0	28	PDB header: hydrolase Chain: A: PDB Molecule: putative isochorismatase hydrolase; PDBTitle: crystal structure of putative isochorismatase hydrolase from2 oleispira antarctica
19	d1yaca	Alignment		100.0	18	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
20	c3gbcA	Alignment		100.0	17	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
21	c2a67C	Alignment	not modelled	100.0	24	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: isochorismatase family protein; PDBTitle: crystal structure of isochorismatase family protein
22	c1yzaV	Alignment	not modelled	100.0	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: hypothetical protein from trypanosoma cruzi
23	c2b34C	Alignment	not modelled	100.0	19	PDB header: hydrolase Chain: C: PDB Molecule: mar1 ribonuclease; PDBTitle: structure of mar1 ribonuclease from caenorhabditis elegans
24	d1x9ga	Alignment	not modelled	100.0	17	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
25	c2h0rD	Alignment	not modelled	100.0	20	PDB header: hydrolase Chain: D: PDB Molecule: nicotinamidase; PDBTitle: structure of the yeast nicotinamidase pnclp
26	d1cmwa2	Alignment	not modelled	85.4	16	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
27	c1xlqA	Alignment	not modelled	80.8	17	PDB header: lyase Chain: A: PDB Molecule: tryptophan synthase beta chain; PDBTitle: crystal structure of tryptophan synthase beta chain from thermus2 thermophilus hb8
28	d1tfra2	Alignment	not modelled	66.9	5	Fold: PIN domain-like Superfamily: PIN domain-like Family: 5' to 3' exonuclease catalytic domain
29	c2ihna	Alignment	not modelled	66.7	7	PDB header: hydrolase/dna Chain: A: PDB Molecule: ribonuclease h; PDBTitle: co-crystal of bacteriophage t4 rnase h with a fork dna2 substrate

30	c1ortD	Alignment	not modelled	65.1	12	PDB header: transferase Chain: D: PDB Molecule: ornithine transcarbamoylase; PDBTitle: ornithine transcarbamoylase from pseudomonas aeruginosa
31	d1xdpa3	Alignment	not modelled	65.0	9	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
32	d1a9xa3	Alignment	not modelled	61.6	18	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
33	c3bh0A	Alignment	not modelled	60.7	15	PDB header: replication Chain: A: PDB Molecule: dnab-like replicative helicase; PDBTitle: atpase domain of g40p
34	d1qopb	Alignment	not modelled	57.8	18	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
35	c1cmwA	Alignment	not modelled	54.1	17	PDB header: transferase Chain: A: PDB Molecule: protein (dna polymerase i); PDBTitle: crystal structure of taq dna-polymerase shows a new2 orientation for the structure-specific nuclease domain
36	d1vp8a	Alignment	not modelled	48.2	19	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: MTH1675-like
37	c2w37A	Alignment	not modelled	47.6	10	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase, catabolic; PDBTitle: crystal structure of the hexameric catabolic ornithine2 transcarbamoylase from lactobacillus hilgardii
38	c1xdoB	Alignment	not modelled	47.6	9	PDB header: transferase Chain: B: PDB Molecule: polyphosphate kinase; PDBTitle: crystal structure of escherichia coli polyphosphate kinase
39	c1f8sA	Alignment	not modelled	45.6	28	PDB header: oxidoreductase Chain: A: PDB Molecule: l-amino acid oxidase; PDBTitle: crystal structure of l-amino acid oxidase from calloselasma2 rhodostoma, complexed with three molecules of o-aminobenzoate.
40	c3bgwD	Alignment	not modelled	43.4	15	PDB header: replication Chain: D: PDB Molecule: dnab-like replicative helicase; PDBTitle: the structure of a dnab-like replicative helicase and its interactions2 with primase
41	c1vlvA	Alignment	not modelled	43.0	12	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: crystal structure of ornithine carbamoyltransferase (tm1097) from2 thermotoga maritima at 2.25 a resolution
42	d1szpa2	Alignment	not modelled	42.1	11	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
43	c1xp8A	Alignment	not modelled	40.0	17	PDB header: dna binding protein Chain: A: PDB Molecule: reca protein; PDBTitle: "deinococcus radiodurans reca in complex with atp-gamma-s"
44	d2ae2a	Alignment	not modelled	39.1	19	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
45	d1pv8a	Alignment	not modelled	36.0	18	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: 5-aminolaevulinate dehydratase, ALAD (porphobilinogen synthase)
46	c2rgoA	Alignment	not modelled	35.3	21	PDB header: oxidoreductase Chain: A: PDB Molecule: alpha-glycerophosphate oxidase; PDBTitle: structure of alpha-glycerophosphate oxidase from2 streptococcus sp.: a template for the mitochondrial alpha-3 glycerophosphate dehydrogenase
47	c3cbwA	Alignment	not modelled	34.4	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ydht protein; PDBTitle: crystal structure of the ydht protein from bacillus subtilis
48	c3nugA	Alignment	not modelled	32.4	21	PDB header: oxidoreductase Chain: A: PDB Molecule: 3-oxoacyl-(acyl-carrier protein) reductase; PDBTitle: crystal structure of wild type tetrameric pyridoxal 4-dehydrogenase2 from mesorhizobium loti
49	c1ipaA	Alignment	not modelled	31.8	18	PDB header: transferase Chain: A: PDB Molecule: rna 2'-o-ribose methyltransferase; PDBTitle: crystal structure of rna 2'-o ribose methyltransferase
50	d1xp8a1	Alignment	not modelled	30.2	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
51	c2dfIA	Alignment	not modelled	29.9	10	PDB header: recombination Chain: A: PDB Molecule: dna repair and recombination protein rada; PDBTitle: crystal structure of left-handed rada filament
52	d2iida1	Alignment	not modelled	29.0	24	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD-linked reductases, N-terminal domain
53	c1t4gA	Alignment	not modelled	28.5	13	PDB header: recombination Chain: A: PDB Molecule: dna repair and recombination protein rada; PDBTitle: atpase in complex with amp-pnp
54	d1duvg2	Alignment	not modelled	28.1	15	Fold: ATC-Iike Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase

55	d1ela1	Alignment	not modelled	28.0	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
56	d1dxha2	Alignment	not modelled	27.2	17	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
57	d1xsea	Alignment	not modelled	26.9	23	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
58	c1z2ia	Alignment	not modelled	26.9	16	PDB header: oxidoreductase Chain: A: PDB Molecule: malate dehydrogenase; PDBTitle: crystal structure of agrobacterium tumefaciens malate2 dehydrogenase, new york structural genomics consortium
59	d1xu9a	Alignment	not modelled	26.5	25	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
60	c3o26A	Alignment	not modelled	26.2	14	PDB header: oxidoreductase Chain: A: PDB Molecule: salutaridine reductase; PDBTitle: the structure of salutaridine reductase from papaver somniferum.
61	c2ha8A	Alignment	not modelled	25.8	9	PDB header: rna binding protein Chain: A: PDB Molecule: tar (hiv-1) rna loop binding protein; PDBTitle: methyltransferase domain of human tar (hiv-1) rna binding2 protein 1
62	c3nkIA	Alignment	not modelled	25.8	13	PDB header: oxidoreductase/lyase Chain: A: PDB Molecule: udp-d-quinovosamine 4-dehydrogenase; PDBTitle: crystal structure of udp-d-quinovosamine 4-dehydrogenase from vibrio2 fischeri
63	c2vyea	Alignment	not modelled	25.4	22	PDB header: hydrolase Chain: A: PDB Molecule: replicative dna helicase; PDBTitle: crystal structure of the dnac-ssdna complex
64	d1tyza	Alignment	not modelled	25.4	22	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
65	d1f2da	Alignment	not modelled	25.3	18	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
66	d1v8za1	Alignment	not modelled	25.0	16	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
67	c2y8kA	Alignment	not modelled	24.8	13	PDB header: hydrolase Chain: A: PDB Molecule: carbohydrate binding family 6; PDBTitle: structure of ctgh5-cbm6, an arabinoxylan-specific xylanase.
68	c3g68A	Alignment	not modelled	24.7	18	PDB header: isomerase Chain: A: PDB Molecule: putative phosphosugar isomerase; PDBTitle: crystal structure of a putative phosphosugar isomerase (cd3275) from2 clostridium difficile 630 at 1.80 a resolution
69	c31daA	Alignment	not modelled	24.7	12	PDB header: dna binding protein Chain: A: PDB Molecule: dna repair protein rad51; PDBTitle: yeast rad51 h352y filament interface mutant
70	c3euad	Alignment	not modelled	24.5	9	PDB header: isomerase Chain: D: PDB Molecule: putative fructose-aminoacid-6-phosphate deglycase; PDBTitle: crystal structure of a putative phosphosugar isomerase (bsu32610) from2 bacillus subtilis at 1.90 a resolution
71	c3fkjA	Alignment	not modelled	24.4	7	PDB header: isomerase Chain: A: PDB Molecule: putative phosphosugar isomerasess; PDBTitle: crystal structure of a putative phosphosugar isomerase (stm_0572) from2 salmonella typhimurium lt2 at 2.12 a resolution
72	c2recB	Alignment	not modelled	24.3	17	PDB header: helicase PDB COMPND:
73	d1ooea	Alignment	not modelled	24.3	10	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
74	c3ijrf	Alignment	not modelled	24.2	20	PDB header: oxidoreductase Chain: F: PDB Molecule: oxidoreductase, short chain dehydrogenase/reductase family; PDBTitle: 2.05 angstrom resolution crystal structure of a short chain2 dehydrogenase from bacillus anthracis str. 'ames ancestor' in complex3 with nad+
75	c2nm0B	Alignment	not modelled	24.0	23	PDB header: oxidoreductase Chain: B: PDB Molecule: probable 3-oxacyl-(acyl-carrier-protein) reductase; PDBTitle: crystal structure of sco1815: a beta-ketoacyl-acyl carrier protein2 reductase from streptomyces coelicolor a3(2)
76	c3updA	Alignment	not modelled	23.9	11	PDB header: transferase Chain: A: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: 2.9 angstrom crystal structure of ornithine carbamoyltransferase2 (argf) from vibrio vulnificus
77	c3uoeb	Alignment	not modelled	23.8	10	PDB header: oxidoreductase Chain: B: PDB Molecule: dehydrogenase; PDBTitle: the crystal structure of dehydrogenase from sinorhizobium meliloti
78	d1qsga	Alignment	not modelled	23.4	16	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases

79	c3toxG_	Alignment	not modelled	23.1	19	PDB header: oxidoreductase Chain: G: PDB Molecule: short chain dehydrogenase; PDBTitle: crystal structure of a short chain dehydrogenase in complex with2 nad(p) from sinorhizobium meliloti 1021
80	c2b4qB_	Alignment	not modelled	22.8	25	PDB header: oxidoreductase Chain: B: PDB Molecule: rharnolipids biosynthesis 3-oxoacyl-[acyl-] PDBTitle: pseudomonas aeruginosa rhlg/nadp active-site complex
81	d1xrha_	Alignment	not modelled	22.6	8	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
82	d1c0pa1	Alignment	not modelled	22.4	21	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: D-aminoacid oxidase, N-terminal domain
83	d1onfa2	Alignment	not modelled	21.5	12	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
84	c2rghA_	Alignment	not modelled	21.1	21	PDB header: oxidoreductase Chain: A: PDB Molecule: alpha-glycerophosphate oxidase; PDBTitle: structure of alpha-glycerophosphate oxidase from2 streptococcus sp.: a template for the mitochondrial alpha-3 glycerophosphate dehydrogenase
85	d2o8ra3	Alignment	not modelled	21.0	11	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
86	d1reoa1	Alignment	not modelled	20.9	26	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD-linked reductases, N-terminal domain
87	c2e4gB_	Alignment	not modelled	20.4	15	PDB header: biosynthetic protein, flavoprotein Chain: B: PDB Molecule: tryptophan halogenase; PDBTitle: rebh with bound l-trp
88	d1xg5a_	Alignment	not modelled	20.3	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
89	d1xq1a_	Alignment	not modelled	20.0	15	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
90	d2i1qa2	Alignment	not modelled	19.8	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
91	c2v1dA_	Alignment	not modelled	19.5	32	PDB header: oxidoreductase/repressor Chain: A: PDB Molecule: lysine-specific histone demethylase 1; PDBTitle: structural basis of lsd1-corest selectivity in histone h32 recognition
92	c2xagA_	Alignment	not modelled	19.5	32	PDB header: transcription Chain: A: PDB Molecule: lysine-specific histone demethylase 1; PDBTitle: crystal structure of lsd1-corest in complex with para-bromo-2 (-)-trans-2-phenylcyclopropyl-1-amine
93	d1nxua_	Alignment	not modelled	19.1	12	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
94	d1a9xa4	Alignment	not modelled	19.1	18	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
95	d1iz5a1	Alignment	not modelled	18.9	18	Fold: DNA clamp Superfamily: DNA clamp Family: DNA polymerase processivity factor
96	d1rfma_	Alignment	not modelled	18.5	20	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
97	c2weuD_	Alignment	not modelled	18.3	14	PDB header: antifungal protein Chain: D: PDB Molecule: tryptophan 5-halogenase; PDBTitle: crystal structure of tryptophan 5-halogenase (pyrh) complex2 with substrate tryptophan
98	d1plqa1	Alignment	not modelled	17.9	9	Fold: DNA clamp Superfamily: DNA clamp Family: DNA polymerase processivity factor
99	d2c07a1	Alignment	not modelled	17.5	9	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases