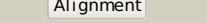
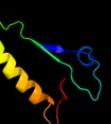
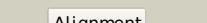


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P00936
Date	Thu Jan 5 10:57:15 GMT 2012
Unique Job ID	c2bda27bc582586c

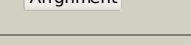
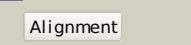
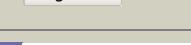
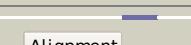
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2rffA_			94.5	21	PDB header: transferase Chain: A; PDB Molecule: putative nucleotidyltransferase; PDBTitle: crystal structure of a putative nucleotidyltransferase2 (np_343093.1) from sulfolobus solfataricus at 1.40 a3 resolution
2	d1ylq1a1			93.6	16	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
3	d1wota_			93.6	24	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
4	d1no5a_			93.1	28	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
5	c3k7dA_			91.5	19	PDB header: transferase Chain: A; PDB Molecule: glutamate-ammonia-ligase adenyllyltransferase; PDBTitle: c-terminal (adenylation) domain of e.coli glutamine synthetase2 adenyllyltransferase
6	c1v4aA_			91.3	15	PDB header: transferase Chain: A; PDB Molecule: glutamate-ammonia-ligase adenyllyltransferase; PDBTitle: structure of the n-terminal domain of escherichia coli2 glutamine synthetase adenyllyltransferase
7	d1knya2			89.8	13	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Kanamycin nucleotidyltransferase (KNTase), N-terminal domain
8	d1v4aa2			85.7	15	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: GlnE-like domain
9	c1knyA_			76.4	13	PDB header: transferase Chain: A; PDB Molecule: kanamycin nucleotidyltransferase; PDBTitle: kanamycin nucleotidyltransferase
10	d2q66a2			75.2	20	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly(A) polymerase, PAP, N-terminal domain
11	d1mzja2			73.1	23	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like

12	d1ub7a2			72.6	17	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
13	d1u6ea2			70.6	18	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
14	c1q78A			70.5	18	PDB header: transferase Chain: A: PDB Molecule: poly(a) polymerase alpha; PDBTitle: crystal structure of poly(a) polymerase in complex with 3'-2 dntp and magnesium chloride
15	d1q79a2			68.7	18	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly(A) polymerase, PAP, N-terminal domain
16	d1hnja2			66.3	25	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
17	c1cm1A			64.7	14	PDB header: transferase Chain: A: PDB Molecule: protein (chalcone synthase); PDBTitle: chalcone synthase from alfalfa complexed with malonyl-coa
18	d1u0ma2			63.6	22	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
19	c3c66B			59.0	24	PDB header: transferase Chain: B: PDB Molecule: poly(a) polymerase; PDBTitle: yeast poly(a) polymerase in complex with fip1 residues 80-105
20	c1u0mA			52.2	21	PDB header: biosynthetic protein Chain: A: PDB Molecule: putative polyketide synthase; PDBTitle: crystal structure of 1,3,6,8-tetrahydroxynaphthalene synthase (thns2) from streptomyces coelicolor a3(2): a bacterial type iii polyketide3 synthase (pk3) provides insights into enzymatic control of reactive4 polyketide intermediates
21	d1gpla			51.4	8	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
22	c3u80A		not modelled	51.1	32	PDB header: unknown function Chain: A: PDB Molecule: 3-dehydroquinate dehydratase, type ii; PDBTitle: 1.60 angstrom resolution crystal structure of a 3-dehydroquinate2 dehydratase-like protein from bifidobacterium longum
23	d1t1ra2		not modelled	50.8	46	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
24	c3a5qA		not modelled	50.1	12	PDB header: transferase Chain: A: PDB Molecule: benzalacetone synthase; PDBTitle: benzalacetone synthase from rheum palmatum
25	c3n8kG		not modelled	49.4	25	PDB header: lyase Chain: G: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: type ii dehydroquinase from mycobacterium tuberculosis complexed with2 citrazinic acid
26	d2f8aa1		not modelled	48.5	8	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
27	c2uygF		not modelled	48.1	29	PDB header: lyase Chain: F: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: crystallographic structure of the typeii 3-dehydroquinase2 from thermus thermophilus

28	d1h05a_	Alignment	not modelled	44.7	23	Fold: Flavodoxin-like Superfamily: Type II 3-dehydroquinate dehydratase Family: Type II 3-dehydroquinate dehydratase
29	d1gtza_	Alignment	not modelled	42.4	21	Fold: Flavodoxin-like Superfamily: Type II 3-dehydroquinate dehydratase Family: Type II 3-dehydroquinate dehydratase
30	c3nybA_	Alignment	not modelled	41.2	27	PDB header: transferase/rna binding protein Chain: A: PDB Molecule: poly(a) rna polymerase protein 2; PDBTitle: structure and function of the polymerase core of tramp, a rna2 surveillance complex
31	d1bi5a2_	Alignment	not modelled	39.0	12	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
32	c2r37A_	Alignment	not modelled	38.5	8	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 3; PDBTitle: crystal structure of human glutathione peroxidase 3 (selenocysteine to 2 glycine mutant)
33	c3o6xC_	Alignment	not modelled	37.8	22	PDB header: ligase Chain: C: PDB Molecule: glutamine synthetase; PDBTitle: crystal structure of the type iii glutamine synthetase from2 bacteroides fragilis
34	c1k5hB_	Alignment	not modelled	37.4	46	PDB header: oxidoreductase Chain: B: PDB Molecule: 1-deoxy-d-xylulose-5-phosphate reductoisomerase; PDBTitle: 1-deoxy-d-xylulose-5-phosphate reductoisomerase
35	c3au9A_	Alignment	not modelled	36.8	46	PDB header: isomerase/isomerase inhibitor Chain: A: PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: crystal structure of the quaternary complex-1 of an isomerase
36	d1xhna1	Alignment	not modelled	36.6	31	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
37	d1fsfa_	Alignment	not modelled	34.8	22	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: NagB-like
38	d1ee0a2	Alignment	not modelled	33.0	12	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
39	d1q0qa2	Alignment	not modelled	32.4	46	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
40	c2h84A_	Alignment	not modelled	31.5	21	PDB header: biosynthetic protein, transferase Chain: A: PDB Molecule: steely1; PDBTitle: crystal structure of the c-terminal type iii polyketide synthase (pks2 iii) domain of 'steely1' (a type i/iii pks hybrid from dictyostelium)
41	c3oitB_	Alignment	not modelled	31.5	19	PDB header: transferase Chain: B: PDB Molecule: os07g0271500 protein; PDBTitle: crystal structure of curcuminoïd synthase cus from oryza sativa
42	c2i6hA_	Alignment	not modelled	31.2	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein atu0120; PDBTitle: structure of protein of unknown function atu0120 from agrobacterium2 tumefaciens
43	d2i6ha1	Alignment	not modelled	31.2	14	Fold: alpha-alpha superhelix Superfamily: TPR-like Family: Atu0120-like
44	c2he3A_	Alignment	not modelled	30.1	8	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 2; PDBTitle: crystal structure of the selenocysteine to cysteine mutant of human2 glutathione peroxidase 2 (gpx2)
45	c2p0ub_	Alignment	not modelled	29.7	15	PDB header: transferase Chain: B: PDB Molecule: stilbenecarboxylate synthase 2; PDBTitle: crystal structure of marchantia polymorpha stilbenecarboxylate2 synthase 2 (stcs2)
46	c3jz0B_	Alignment	not modelled	28.8	18	PDB header: transferase/antibiotic Chain: B: PDB Molecule: lincosamide nucleotidyltransferase; PDBTitle: lincb complexed with clindamycin and ampcpp
47	d1uqra_	Alignment	not modelled	28.6	27	Fold: Flavodoxin-like Superfamily: Type II 3-dehydroquinate dehydratase Family: Type II 3-dehydroquinate dehydratase
48	c2obiA_	Alignment	not modelled	28.2	11	PDB header: oxidoreductase Chain: A: PDB Molecule: phospholipid hydroperoxide glutathione PDBTitle: crystal structure of the selenocysteine to cysteine mutant2 of human phospholipid hydroperoxide glutathione peroxidase3 (gpx4)
49	c2eghA_	Alignment	not modelled	27.8	46	PDB header: oxidoreductase Chain: A: PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: crystal structure of 1-deoxy-d-xylulose 5-phosphate reductoisomerase2 complexed with a magnesium ion, nadph and fosmidomycin
50	c2p5qA_	Alignment	not modelled	26.7	18	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 5; PDBTitle: crystal structure of the poplar glutathione peroxidase 5 in2 the reduced form
51	d1lu0ua2	Alignment	not modelled	26.6	18	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
52	c1sz1A_	Alignment	not modelled	26.3	15	PDB header: transferase/rna Chain: A: PDB Molecule: tRNA nucleotidyltransferase; PDBTitle: mechanism of cca-adding enzymes specificity revealed by crystal2 structures of ternary complexes
						PDB header: oxidoreductase

53	c2p31B_	Alignment	not modelled	26.2	16	Chain: B; PDB Molecule: glutathione peroxidase 7; PDBTitle: crystal structure of human glutathione peroxidase 7
54	c2x3eA_	Alignment	not modelled	25.6	19	PDB header: transferase Chain: A; PDB Molecule: 3-oxoacyl-[acyl-carrier-protein] synthase 3; PDBTitle: crystal structure of 3-oxoacyl-(acyl carrier protein)2 synthase iii, fabh from pseudomonas aeruginosa pao1
55	c1ee0A_	Alignment	not modelled	25.2	11	PDB header: transferase Chain: A; PDB Molecule: 2-pyrone synthase; PDBTitle: 2-pyrone synthase complexed with acetoacetyl-coa
56	c2jcyA_	Alignment	not modelled	25.0	46	PDB header: oxidoreductase Chain: A; PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: x-ray structure of mutant 1-deoxy-d-xylulose 5-phosphate 2 reductoisomerase, dxr, rv2870c, from mycobacterium3 tuberculosis
57	d1r0ka2	Alignment	not modelled	24.9	46	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
58	d1rh2a_	Alignment	not modelled	24.9	31	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Interferons/interleukin-10 (IL-10)
59	d1thga_	Alignment	not modelled	24.6	17	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Fungal lipases
60	d1teda_	Alignment	not modelled	24.6	22	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
61	c3cynC_	Alignment	not modelled	24.2	13	PDB header: oxidoreductase Chain: C; PDB Molecule: probable glutathione peroxidase 8; PDBTitle: the structure of human gpx8
62	c3hn6D_	Alignment	not modelled	24.2	14	PDB header: isomerase Chain: D; PDB Molecule: glucosamine-6-phosphate deaminase; PDBTitle: crystal structure of glucosamine-6-phosphate deaminase from borrelia2 burgdorferi
63	c3hcza_	Alignment	not modelled	23.2	9	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: possible thiol-disulfide isomerase; PDBTitle: the crystal structure of a domain of possible thiol-disulfide2 isomerase from cytophaga hutchinsonii atcc 33406.
64	c3I76B_	Alignment	not modelled	22.9	18	PDB header: transferase Chain: B; PDB Molecule: aspartokinase; PDBTitle: crystal structure of aspartate kinase from synechocystis
65	c2kw7A_	Alignment	not modelled	22.6	16	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: conserved domain protein; PDBTitle: solution nmr structure of the n-terminal domain of protein pg_03612 from p.gingivalis, northeast structural genomics consortium target3 pgr37a
66	c3ng0A_	Alignment	not modelled	21.8	21	PDB header: ligase Chain: A; PDB Molecule: glutamine synthetase; PDBTitle: crystal structure of glutamine synthetase from synechocystis sp. pcc2 6803
67	c1w17A_	Alignment	not modelled	21.3	13	PDB header: hydrolase Chain: A; PDB Molecule: probable polysaccharide deacetylase pdaa; PDBTitle: structure of bacillus subtilis pdaa, a family 42 carbohydrate esterase.
68	d1xdpa1	Alignment	not modelled	21.2	73	Fold: Spectrin repeat-like Superfamily: PPK N-terminal domain-like Family: PPK N-terminal domain-like
69	d1z21a1	Alignment	not modelled	21.0	47	Fold: Type III secretion system domain Superfamily: Type III secretion system domain Family: YopR Core
70	c3fkyD_	Alignment	not modelled	20.8	12	PDB header: ligase Chain: D; PDB Molecule: glutamine synthetase; PDBTitle: crystal structure of the glutamine synthetase gln1delta182 from the yeast saccharomyces cerevisiae
71	d1qo7a_	Alignment	not modelled	20.6	23	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Epoxide hydrolase
72	c1zowB_	Alignment	not modelled	20.1	17	PDB header: transferase Chain: B; PDB Molecule: 3-oxoacyl-[acyl-carrier-protein] synthase iii; PDBTitle: crystal structure of s. aureus fabh, beta-ketoacyl carrier protein2 synthase iii
73	d2h7ca1	Alignment	not modelled	20.0	17	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Acetylcholinesterase-like
74	c1r0ID_	Alignment	not modelled	19.9	46	PDB header: oxidoreductase Chain: D; PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: 1-deoxy-d-xylulose 5-phosphate reductoisomerase from2 zymomonas mobilis in complex with nadph
75	d1ne7a_	Alignment	not modelled	19.6	17	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: NagB-like
76	c3dwvB_	Alignment	not modelled	19.6	8	PDB header: oxidoreductase Chain: B; PDB Molecule: glutathione peroxidase-like protein; PDBTitle: glutathione peroxidase-type tryparedoxin peroxidase,2 oxidized form
77	c1icfB_	Alignment	not modelled	19.5	63	PDB header: hydrolase Chain: B; PDB Molecule: protein (cathepsin I: light chain); PDBTitle: crystal structure of mhc class ii associated p41 ii fragment in2 complex with cathepsin I PDB header: oxidoreductase

78	c3a14B		Alignment	not modelled	19.2	31	Chain: B; PDB Molecule: 1-deoxy-d-xylulose 5-phosphate reductoisomerase; PDBTitle: crystal structure of dxr from thermotoga maritima, in complex with2 nadph
79	c2djqC		Alignment	not modelled	19.0	38	PDB header: hydrolase Chain: C; PDB Molecule: dipeptidyl-peptidase 1; PDBTitle: re-determination of the native structure of human dipeptidyl peptidase2 i (cathepsin c)
80	c3il3A		Alignment	not modelled	19.0	21	PDB header: transferase Chain: A; PDB Molecule: 3-oxoacyl-[acyl-carrier-protein] synthase 3; PDBTitle: structure of haemophilus influenzae fabh
81	c2v1mA		Alignment	not modelled	18.7	8	PDB header: oxidoreductase Chain: A; PDB Molecule: glutathione peroxidase; PDBTitle: crystal structure of schistosoma mansoni glutathione2 peroxidase
82	c2qm2B		Alignment	not modelled	18.7	21	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: putative hopj type iii effector protein; PDBTitle: putative hopj type iii effector protein from vibrio parahaemolyticus
83	c3eytA		Alignment	not modelled	18.1	13	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein spoa0173; PDBTitle: crystal structure of thioredoxin-like superfamily protein spoa0173
84	c1xetD		Alignment	not modelled	18.1	14	PDB header: transferase Chain: D; PDB Molecule: dihydroinosylvin synthase; PDBTitle: crystal structure of stilbene synthase from pinus2 sylvestris, complexed with methylmalonyl coa
85	d1qhma		Alignment	not modelled	18.0	7	Fold: PFL-like glycyl radical enzymes Superfamily: PFL-like glycyl radical enzymes Family: PFL-like
86	d1z5ye1		Alignment	not modelled	17.9	6	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
87	c3pw3E		Alignment	not modelled	17.9	38	PDB header: hydrolase Chain: E; PDB Molecule: aminopeptidase c; PDBTitle: crystal structure of a cysteine protease (bdi_2249) from2 parabacteroides dasatonsis atcc 8503 at 2.23 a resolution
88	d1gqoa		Alignment	not modelled	17.8	27	Fold: Flavodoxin-like Superfamily: Type II 3-dehydroquinate dehydratase Family: Type II 3-dehydroquinate dehydratase
89	c3lwzC		Alignment	not modelled	17.7	32	PDB header: lyase Chain: C; PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: 1.65 angstrom resolution crystal structure of type ii 3-2 dehydroquinate dehydratase (aroq) from yersinia pestis
90	c3se4B		Alignment	not modelled	17.3	17	PDB header: immune system receptor Chain: B; PDB Molecule: interferon omega-1; PDBTitle: human ifnw-ifnar ternary complex
91	c3ndjA		Alignment	not modelled	17.0	15	PDB header: transferase Chain: A; PDB Molecule: methyltransferase; PDBTitle: x-ray structure of a c-3'-methyltransferase in complex with s-2 adenosyl-l-homocysteine and sugar product
92	c3aleB		Alignment	not modelled	16.4	17	PDB header: transferase Chain: B; PDB Molecule: os07g0271500 protein; PDBTitle: a type iii polyketide synthase that produces diarylheptanoid
93	d1b5la		Alignment	not modelled	16.4	16	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Interferons/interleukin-10 (IL-10)
94	c2rlia		Alignment	not modelled	16.2	22	PDB header: metal transport Chain: A; PDB Molecule: sco2 protein homolog, mitochondrial; PDBTitle: solution structure of cu(i) human sco2
95	c2d3al		Alignment	not modelled	16.1	18	PDB header: ligase Chain: J; PDB Molecule: glutamine synthetase; PDBTitle: crystal structure of the maize glutamine synthetase2 complexed with adp and methionine sulfoximine phosphate
96	d1thea		Alignment	not modelled	16.1	63	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
97	c2rcnA		Alignment	not modelled	15.9	24	PDB header: hydrolase Chain: A; PDB Molecule: probable gtpase engc; PDBTitle: crystal structure of the ribosomal interacting gtpase yjeq from the2 enterobacterial species salmonella typhimurium.
98	d1wu3i		Alignment	not modelled	15.9	31	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Interferons/interleukin-10 (IL-10)
99	d1u0la2		Alignment	not modelled	15.7	23	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins