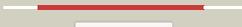
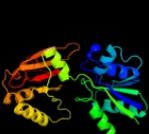


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P67087
Date	Thu Jan 5 12:10:24 GMT 2012
Unique Job ID	a8b2fc3465c15dfe

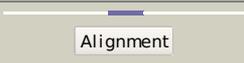
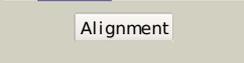
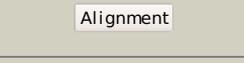
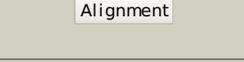
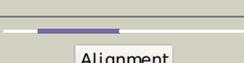
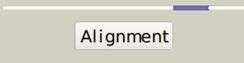
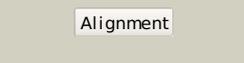
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3kwpA_	 Alignment		100.0	49	PDB header: transferase Chain: A: PDB Molecule: predicted methyltransferase; PDBTitle: crystal structure of putative methyltransferase from lactobacillus2 brevis
2	d1cbfa_	 Alignment		100.0	17	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
3	c1cbfa_	 Alignment		100.0	17	PDB header: methyltransferase Chain: A: PDB Molecule: cobalt-precorrin-4 transmethylase; PDBTitle: the x-ray structure of a cobalamin biosynthetic enzyme, cobalt2 precorrin-4 methyltransferase, cbif
4	c1pjtb_	 Alignment		100.0	20	PDB header: transferase/oxidoreductase/lyase Chain: B: PDB Molecule: siroheme synthase; PDBTitle: the structure of the ser128ala point-mutant variant of cysg,2 the multifunctional3 methyltransferase/dehydrogenase/ferrochelatae for4 siroheme synthesis
5	c2yboA_	 Alignment		100.0	18	PDB header: transferase Chain: A: PDB Molecule: methyltransferase; PDBTitle: the x-ray structure of the sam-dependent uroporphyrinogen2 iii methyltransferase nire from pseudomonas aeruginosa in3 complex with sah
6	d1wyza1	 Alignment		100.0	22	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
7	d1s4da_	 Alignment		100.0	15	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
8	d1piqa2	 Alignment		100.0	20	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
9	c3ndcB_	 Alignment		100.0	17	PDB header: transferase Chain: B: PDB Molecule: precorrin-4 c(11)-methyltransferase; PDBTitle: crystal structure of precorrin-4 c11-methyltransferase from2 rhodobacter capsulatus
10	c2zvba_	 Alignment		100.0	21	PDB header: transferase Chain: A: PDB Molecule: precorrin-3 c17-methyltransferase; PDBTitle: crystal structure of tt0207 from thermus thermophilus hb8
11	d1va0a1	 Alignment		100.0	14	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase

12	d1wdea_	Alignment		100.0	18	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
13	d1ve2a1	Alignment		100.0	21	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
14	c3nutC_	Alignment		100.0	20	PDB header: transferase Chain: C: PDB Molecule: precocorrin-3 methylase; PDBTitle: crystal structure of the methyltransferase cobj
15	c3nd1B_	Alignment		100.0	16	PDB header: transferase Chain: B: PDB Molecule: precocorrin-6a synthase/cobf protein; PDBTitle: crystal structure of precocorrin-6a synthase from rhodobacter capsulatus
16	c2qbuA_	Alignment		100.0	18	PDB header: transferase Chain: A: PDB Molecule: precocorrin-2 methyltransferase; PDBTitle: crystal structure of methanothermobacter thermautotrophicus cbil
17	c2e0kA_	Alignment		100.0	21	PDB header: transferase Chain: A: PDB Molecule: precocorrin-2 c20-methyltransferase; PDBTitle: crystal structure of cbil, a methyltransferase involved in anaerobic2 vitamin b12 biosynthesis
18	d1vhva_	Alignment		100.0	13	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
19	d2deka1	Alignment		100.0	21	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
20	c3i4tA_	Alignment		100.0	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: diphthine synthase; PDBTitle: crystal structure of putative diphthine synthase from2 entamoeba histolytica
21	c2nnpA_	Alignment	not modelled	100.0	17	PDB header: transferase Chain: A: PDB Molecule: putative cobalamin synthesis related protein; PDBTitle: crystal structure of putative cobalamin synthesis related protein2 (cobf) from corynebacterium diphtheriae
22	c2bb3B_	Alignment	not modelled	100.0	19	PDB header: transferase Chain: B: PDB Molecule: cobalamin biosynthesis precocorrin-6y methylase (cbie); PDBTitle: crystal structure of cobalamin biosynthesis precocorrin-6y methylase2 (cbie) from archaeoglobus fulgidus
23	d2bb3a1	Alignment	not modelled	100.0	18	Fold: Tetrapyrrole methylase Superfamily: Tetrapyrrole methylase Family: Tetrapyrrole methylase
24	c3fq6A_	Alignment	not modelled	100.0	40	PDB header: transferase Chain: A: PDB Molecule: methyltransferase; PDBTitle: the crystal structure of a methyltransferase domain from bacteroides2 thetaiotaomicron vpi
25	c3hh1D_	Alignment	not modelled	100.0	45	PDB header: transferase Chain: D: PDB Molecule: tetrapyrrole methylase family protein; PDBTitle: the structure of a tetrapyrrole methylase family protein domain from2 chlorobium tepidum t1s
26	d2ez1a_	Alignment		85.4	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
27	c2px0D_	Alignment	not modelled	75.1	15	PDB header: biosynthetic protein Chain: D: PDB Molecule: flagellar biosynthesis protein flfh;

						PDBTitle: crystal structure of flhf complexed with gmppnp/mg(2+)
28	c3q3vA	Alignment	not modelled	73.8	20	PDB header: transferase Chain: A: PDB Molecule: phosphoglycerate kinase; PDBTitle: crystal structure of phosphoglycerate kinase from campylobacter2 jejuni.
29	c1w78A	Alignment	not modelled	56.4	14	PDB header: synthase Chain: A: PDB Molecule: folc bifunctional protein; PDBTitle: e.coli folc in complex with dhpp and adp
30	c2z1dA	Alignment	not modelled	51.7	12	PDB header: metal binding protein Chain: A: PDB Molecule: hydrogenase expression/formation protein hypd; PDBTitle: crystal structure of [nife] hydrogenase maturation protein, hypd from2 thermococcus kodakaraensis
31	d1ii7a	Alignment	not modelled	51.2	20	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: DNA double-strand break repair nuclease
32	c3navB	Alignment	not modelled	44.0	12	PDB header: lyase Chain: B: PDB Molecule: tryptophan synthase alpha chain; PDBTitle: crystal structure of an alpha subunit of tryptophan synthase from2 vibrio cholerae o1 biovar el tor str. n16961
33	c3bioB	Alignment	not modelled	42.3	18	PDB header: oxidoreductase Chain: B: PDB Molecule: oxidoreductase, gfo/ldh/moca family; PDBTitle: crystal structure of oxidoreductase (gfo/ldh/moca family member) from2 porphyromonas gingivalis w83
34	c3l7oB	Alignment	not modelled	40.2	15	PDB header: isomerase Chain: B: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from streptococcus2 mutans ua159
35	d1ptma	Alignment	not modelled	39.4	19	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: PdxA-like
36	c2q5cA	Alignment	not modelled	38.5	13	PDB header: transcription Chain: A: PDB Molecule: ntrc family transcriptional regulator; PDBTitle: crystal structure of ntrc family transcriptional regulator from2 clostridium acetobutylicum
37	c2q7xA	Alignment	not modelled	36.3	17	PDB header: transferase Chain: A: PDB Molecule: upf0052 protein sp_1565; PDBTitle: crystal structure of a putative phospho transferase (sp_1565) from2 streptococcus pneumoniae tigr4 at 2.00 a resolution
38	c3av0A	Alignment	not modelled	35.3	16	PDB header: recombination Chain: A: PDB Molecule: dna double-strand break repair protein mre11; PDBTitle: crystal structure of mre11-rad50 bound to atp s
39	d1t9ba1	Alignment	not modelled	34.4	14	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
40	d2hzba1	Alignment	not modelled	34.4	10	Fold: CofD-like Superfamily: CofD-like Family: CofD-like
41	d1ybha1	Alignment	not modelled	33.4	19	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
42	d1sc6a2	Alignment	not modelled	33.4	17	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: Formate/glycerate dehydrogenases, substrate-binding domain
43	d2d59a1	Alignment	not modelled	33.4	17	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
44	d1xfia	Alignment	not modelled	32.9	18	Fold: AF1104-like Superfamily: AF1104-like Family: AF1104-like
45	c2l0kA	Alignment	not modelled	31.8	26	PDB header: transcription Chain: A: PDB Molecule: stage iii sporulation protein d; PDBTitle: nmr solution structure of a transcription factor spoiiiid in complex2 with dna
46	c2z2uA	Alignment	not modelled	31.7	18	PDB header: metal binding protein Chain: A: PDB Molecule: upf0026 protein mj0257; PDBTitle: crystal structure of archaeal tyw1
47	d1gdha2	Alignment	not modelled	30.2	17	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: Formate/glycerate dehydrogenases, substrate-binding domain
48	d2naca2	Alignment	not modelled	30.0	9	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: Formate/glycerate dehydrogenases, substrate-binding domain
49	c3mvaA	Alignment	not modelled	29.7	14	PDB header: ligase Chain: A: PDB Molecule: udp-n-acetyl muramate:l-alanyl-gamma-d-glutamyl-medo- PDBTitle: crystal structure of a domain from a putative udp-n-acetyl muramate:l-2 alanyl-gamma-d-glutamyl-medo-diaminopimelate ligase from haemophilus3 ducreyi 35000hp
50	c3rhtB	Alignment	not modelled	29.3	12	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: (gatase1)-like protein; PDBTitle: crystal structure of type 1 glutamine amidotransferase (gatase1)-like2 protein from planctomyces limnophilus
51	d2z67a1	Alignment	not modelled	29.0	14	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: SepSecS-like
						Fold: 7-stranded beta/alpha barrel

52	d1v6ta_	Alignment	not modelled	27.4	17	Superfamily: Glycoside hydrolase/deacetylase Family: LamB/YcsF-like
53	d2o8ra3	Alignment	not modelled	27.4	20	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
54	c3auzA_	Alignment	not modelled	26.7	21	PDB header: recombination Chain: A: PDB Molecule: dna double-strand break repair protein mre11; PDBTitle: crystal structure of mre11 with manganese
55	d2gk3a1	Alignment	not modelled	26.5	13	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: STM3548-like
56	d1xtoa_	Alignment	not modelled	26.4	19	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: Coenzyme PQQ synthesis protein B, PqqB
57	c1gqqA_	Alignment	not modelled	25.0	18	PDB header: cell wall biosynthesis Chain: A: PDB Molecule: udp-n-acetylmuramate-l-alanine ligase; PDBTitle: murc - crystal structure of the apo-enzyme from haemophilus2 influenzae
58	d1jeyb2	Alignment	not modelled	24.4	9	Fold: vWA-like Superfamily: vWA-like Family: Ku80 subunit N-terminal domain
59	d1f6ya_	Alignment	not modelled	24.0	18	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Methyltetrahydrofolate-utilizing methyltransferases
60	d1q6za1	Alignment	not modelled	23.4	19	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
61	c3c19A_	Alignment	not modelled	23.2	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein mk0293; PDBTitle: crystal structure of protein mk0293 from methanopyrus kandleri av19
62	c3hl2D_	Alignment	not modelled	22.7	17	PDB header: transferase Chain: D: PDB Molecule: o-phosphoseryl-trna(sec) selenium transferase; PDBTitle: the crystal structure of the human sepsecs-trnasec complex
63	c2q8uA_	Alignment	not modelled	22.7	14	PDB header: hydrolase Chain: A: PDB Molecule: exonuclease, putative; PDBTitle: crystal structure of mre11 from thermotoga maritima msb8 (tm1635) at2.20 a resolution
64	d1ad1a_	Alignment	not modelled	22.6	12	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
65	d1ygya2	Alignment	not modelled	22.3	17	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: Formate/glycerate dehydrogenases, substrate-binding domain
66	c2nacA_	Alignment	not modelled	22.3	10	PDB header: oxidoreductase(aldehyde(d),nad+(a)) Chain: A: PDB Molecule: nad-dependent formate dehydrogenase; PDBTitle: high resolution structures of holo and apo formate dehydrogenase
67	c1z4hA_	Alignment	not modelled	22.1	13	PDB header: protein binding, dna binding protein Chain: A: PDB Molecule: tor inhibition protein; PDBTitle: the response regulator tori belongs to a new family of2 atypical excisionase
68	c3dmdA_	Alignment	not modelled	21.7	18	PDB header: transport protein Chain: A: PDB Molecule: signal recognition particle receptor; PDBTitle: structures and conformations in solution of the signal recognition2 particle receptor from the archaeon pyrococcus furiosus
69	c3cf4G_	Alignment	not modelled	21.5	13	PDB header: oxidoreductase Chain: G: PDB Molecule: acetyl-coa decarboxylase/synthase epsilon subunit; PDBTitle: structure of the codh component of the m. barkeri acds complex
70	d1qbjc_	Alignment	not modelled	21.2	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain
71	d1iuka_	Alignment	not modelled	21.1	32	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
72	c3iwpK_	Alignment	not modelled	20.9	13	PDB header: metal binding protein Chain: K: PDB Molecule: copper homeostasis protein cutc homolog; PDBTitle: crystal structure of human copper homeostasis protein cutc
73	d1t57a_	Alignment	not modelled	20.7	11	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: MTH1675-like
74	c3g2bA_	Alignment	not modelled	20.6	17	PDB header: biosynthetic protein Chain: A: PDB Molecule: coenzyme pqq synthesis protein d; PDBTitle: crystal structure of pqqd from xanthomonas campestris
75	c2yx0A_	Alignment	not modelled	20.2	16	PDB header: metal binding protein Chain: A: PDB Molecule: radical sam enzyme; PDBTitle: crystal structure of p. horikoshii tyw1
76	d2jfga2	Alignment	not modelled	20.0	21	Fold: MurD-like peptide ligases, peptide-binding domain Superfamily: MurD-like peptide ligases, peptide-binding domain Family: MurCDF C-terminal domain
77	d2djia1	Alignment	not modelled	19.9	14	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain

78	c3canA	 Alignment	not modelled	19.4	21	PDB header: lyase activator Chain: A: PDB Molecule: pyruvate-formate lyase-activating enzyme; PDBTitle: crystal structure of a domain of pyruvate-formate lyase-activating2 enzyme from bacteroides vulgatus atcc 8482
79	c2qasA	 Alignment	not modelled	19.2	20	PDB header: hydrolase activator Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of caulobacter crescentus sspb ortholog
80	c2ppvA	 Alignment	not modelled	19.1	22	PDB header: transferase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a protein belonging to the upf0052 (se_0549) from2 staphylococcus epidermidis atcc 12228 at 2.00 a resolution
81	c3qg5D	 Alignment	not modelled	18.5	18	PDB header: hydrolase Chain: D: PDB Molecule: mre11; PDBTitle: the mre11:rad50 complex forms an atp dependent molecular clamp in dna2 double-strand break repair
82	d1jeva2	 Alignment	not modelled	18.4	14	Fold: vWA-like Superfamily: vWA-like Family: Ku70 subunit N-terminal domain
83	d1pvda1	 Alignment	not modelled	18.3	18	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
84	c3ecsD	 Alignment	not modelled	18.2	11	PDB header: translation Chain: D: PDB Molecule: translation initiation factor eif-2b subunit PDBTitle: crystal structure of human eif2b alpha
85	d1p3y1	 Alignment	not modelled	17.9	5	Fold: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Superfamily: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Family: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD
86	c3lqkA	 Alignment	not modelled	17.8	15	PDB header: oxidoreductase Chain: A: PDB Molecule: dipicolinate synthase subunit b; PDBTitle: crystal structure of dipicolinate synthase subunit b from bacillus2 halodurans c
87	c2qazC	 Alignment	not modelled	17.8	20	PDB header: hydrolase activator Chain: C: PDB Molecule: sspB protein; PDBTitle: structure of c. crescentus sspB ortholog
88	c3imkA	 Alignment	not modelled	17.5	20	PDB header: metal binding protein Chain: A: PDB Molecule: putative molybdenum carrier protein; PDBTitle: crystal structure of putative molybdenum carrier protein (yp_461806.1)2 from syntrophus aciditrophicus sb at 1.45 a resolution
89	c2pjmA	 Alignment	not modelled	16.8	18	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: structure of ribose 5-phosphate isomerase a from2 methanocaldococcus jannaschii
90	c3pfnB	 Alignment	not modelled	16.6	12	PDB header: transferase Chain: B: PDB Molecule: nad kinase; PDBTitle: crystal structure of human nad kinase
91	c3oa2B	 Alignment	not modelled	16.3	14	PDB header: oxidoreductase Chain: B: PDB Molecule: wbpb; PDBTitle: crystal structure of the wlba (wbpb) dehydrogenase from pseudomonas2 aeruginosa in complex with nad at 1.5 angstrom resolution
92	c1yirA	 Alignment	not modelled	16.1	10	PDB header: transferase Chain: A: PDB Molecule: nicotinate phosphoribosyltransferase 2; PDBTitle: crystal structure of a nicotinate phosphoribosyltransferase
93	d1t6t1	 Alignment	not modelled	16.0	10	Fold: Toprim domain Superfamily: Toprim domain Family: Toprim domain
94	d1qgpa	 Alignment	not modelled	16.0	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain
95	d2ez9a1	 Alignment	not modelled	15.6	14	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
96	c1lc3A	 Alignment	not modelled	15.5	13	PDB header: oxidoreductase Chain: A: PDB Molecule: biliverdin reductase a; PDBTitle: crystal structure of a biliverdin reductase enzyme-cofactor2 complex
97	d2gxba1	 Alignment	not modelled	15.1	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain
98	d2dlda2	 Alignment	not modelled	15.0	20	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: Formate/glycerate dehydrogenases, substrate-binding domain
99	d2q4qa1	 Alignment	not modelled	15.0	16	Fold: MTH938-like Superfamily: MTH938-like Family: MTH938-like