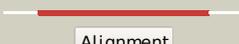
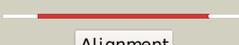
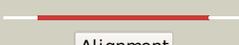
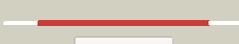


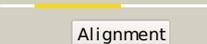
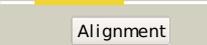
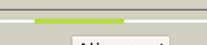
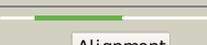
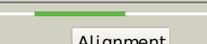
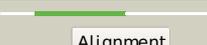
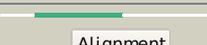
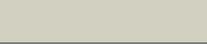
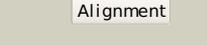
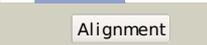
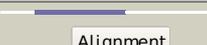
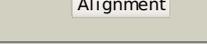
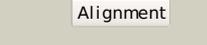
# Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P75893
Date	Thu Jan 5 12:15:43 GMT 2012
Unique Job ID	ae8a37d5bb2b5350

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c2r0xA_</a>	 Alignment		100.0	50	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> possible flavin reductase; <b>PDBTitle:</b> crystal structure of a putative flavin reductase (ycdh_hs_1225) from <i>Haemophilus somnus</i> 129pt at 1.06 Å resolution
2	<a href="#">c3k87B_</a>	 Alignment		100.0	41	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B; <b>PDB Molecule:</b> chlorophenol-4-monooxygenase component 1; <b>PDBTitle:</b> crystal structure of nadh:fad oxidoreductase (tftc) - fad2 complex
3	<a href="#">c3rh7A_</a>	 Alignment		100.0	31	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> hypothetical oxidoreductase; <b>PDBTitle:</b> crystal structure of a hypothetical oxidoreductase (sma0793) from <i>Sinorhizobium meliloti</i> 1021 at 3.00 Å resolution
4	<a href="#">c3cb0B_</a>	 Alignment		100.0	39	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B; <b>PDB Molecule:</b> 4-hydroxyphenylacetate 3-monooxygenase; <b>PDBTitle:</b> cobr
5	<a href="#">c3nfwB_</a>	 Alignment		100.0	25	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B; <b>PDB Molecule:</b> nitrilotriacetate monooxygenase component b; <b>PDBTitle:</b> crystal structure of nitrilotriacetate monooxygenase component b2 (a0r521 homolog) from <i>Mycobacterium thermoresistibile</i>
6	<a href="#">c3pftA_</a>	 Alignment		100.0	19	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> flavin reductase; <b>PDBTitle:</b> crystal structure of untagged c54a mutant flavin reductase (dszd) in2 complex with fmN from <i>Mycobacterium goodii</i>
7	<a href="#">c2qckA_</a>	 Alignment		100.0	22	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> flavin reductase domain protein; <b>PDBTitle:</b> crystal structure of flavin reductase domain protein (yp_831077.1)2 from <i>Arthrobacter</i> sp. fb24 at 1.90 Å resolution
8	<a href="#">c2d38A_</a>	 Alignment		100.0	20	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> hypothetical nadh-dependent fmN oxidoreductase; <b>PDBTitle:</b> the crystal structure of flavin reductase hpac complexed with nadp+
9	<a href="#">c2ecrA_</a>	 Alignment		100.0	26	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> flavin reductase component (hpac) of 4-hydroxyphenylacetate <b>PDBTitle:</b> crystal structure of the ligand-free form of the flavin reductase2 component (hpac) of 4-hydroxyphenylacetate 3-monooxygenase
10	<a href="#">d1wgbA_</a>	 Alignment		100.0	18	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> NADH:FMN oxidoreductase-like
11	<a href="#">d1rz0a_</a>	 Alignment		100.0	27	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> NADH:FMN oxidoreductase-like

12	<a href="#">dli0ra_</a>	Alignment		100.0	21	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> NADH:FMN oxidoreductase-like
13	<a href="#">c3bnkB_</a>	Alignment		100.0	18	<b>PDB header:</b> electron transport <b>Chain:</b> B: <b>PDB Molecule:</b> flavoredoxin; <b>PDBTitle:</b> x-ray crystal structure of flavoredoxin from methanosarcina2 acetivorans
14	<a href="#">c2r6vA_</a>	Alignment		100.0	14	<b>PDB header:</b> flavoprotein <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein ph0856; <b>PDBTitle:</b> crystal structure of fmn-binding protein (np_142786.1) from pyrococcus2 horikoshii at 1.35 a resolution
15	<a href="#">d1ejea_</a>	Alignment		100.0	13	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> NADH:FMN oxidoreductase-like
16	<a href="#">d1usca_</a>	Alignment		100.0	16	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> NADH:FMN oxidoreductase-like
17	<a href="#">c3bpkB_</a>	Alignment		100.0	17	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> nitrilotriacetate monooxygenase component b; <b>PDBTitle:</b> crystal structure of nitrilotriacetate monooxygenase2 component b from bacillus cereus
18	<a href="#">c3e4vA_</a>	Alignment		100.0	12	<b>PDB header:</b> flavoprotein <b>Chain:</b> A: <b>PDB Molecule:</b> nadh:fmn oxidoreductase like protein; <b>PDBTitle:</b> crystal structure of nadh:fmn oxidoreductase like protein in complex2 with fmn (yp_544701.1) from methylobacillus flagellatus kt at 1.40 a3 resolution
19	<a href="#">c3hmzA_</a>	Alignment		100.0	11	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> flavin reductase domain protein, fmn-binding; <b>PDBTitle:</b> crystal structure of a fmn-binding domain of flavin reductases-like2 enzyme (sbal_0626) from shewanella baltica os155 at 1.50 a resolution
20	<a href="#">c2d5mA_</a>	Alignment		100.0	13	<b>PDB header:</b> electron transport <b>Chain:</b> A: <b>PDB Molecule:</b> flavoredoxin; <b>PDBTitle:</b> flavoredoxin of desulfovibrio vulgaris (miyazaki f)
21	<a href="#">c3fgeA_</a>	Alignment	not modelled	100.0	11	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> putative flavin reductase with split barrel domain; <b>PDBTitle:</b> crystal structure of putative flavin reductase with split barrel2 domain (yp_750721.1) from shewanella frigidimarina ncimb 400 at 1.743 a resolution
22	<a href="#">c3b5mD_</a>	Alignment	not modelled	99.9	13	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> D: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of conserved uncharacterized protein from2 rhodospirellula baltica
23	<a href="#">d2imla1</a>	Alignment	not modelled	99.3	11	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> MTH863-like
24	<a href="#">c2ptfB_</a>	Alignment	not modelled	98.6	14	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein mth_863; <b>PDBTitle:</b> crystal structure of protein mth_863 from methanobacterium2 thermoautotrophicum bound to fmn
25	<a href="#">d2nr4a1</a>	Alignment	not modelled	98.6	16	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> MTH863-like
26	<a href="#">d2ptfa1</a>	Alignment	not modelled	98.5	15	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> MTH863-like
27	<a href="#">d1flma_</a>	Alignment	not modelled	95.3	12	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
28	<a href="#">c2q9kA_</a>	Alignment	not modelled	95.0	14	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of a putative oxidoreductase (exiq_1997) from2 exiquobacterium sibiricum 255-15 at 1.59 a

						resolution
29	<a href="#">c2htdB_</a>	 Alignment	not modelled	88.3	6	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> predicted flavin-nucleotide-binding protein from cog3576 <b>PDBTitle:</b> crystal structure of a putative pyridoxamine 5'-phosphate oxidase2 (ldb0262) from lactobacillus delbrueckii subsp. at 1.60 a resolution
30	<a href="#">d1vl7a_</a>	 Alignment	not modelled	78.9	18	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
31	<a href="#">d2hq7a1</a>	 Alignment	not modelled	70.0	10	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
32	<a href="#">c2re7A_</a>	 Alignment	not modelled	60.5	7	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of a pyridoxamine 5'-phosphate oxidase related2 protein (psyc_0186) from psychrobacter arcticus 273-4 at 2.50 a3 resolution
33	<a href="#">d1rfea_</a>	 Alignment	not modelled	60.2	12	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
34	<a href="#">d2asfa1</a>	 Alignment	not modelled	54.1	8	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
35	<a href="#">d2htia1</a>	 Alignment	not modelled	51.9	8	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
36	<a href="#">c2htiA_</a>	 Alignment	not modelled	51.9	8	<b>PDB header:</b> fmn-binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> bh0577 protein; <b>PDBTitle:</b> crystal structure of a flavin-nucleotide-binding protein (bh_0577)2 from bacillus halodurans at 2.50 a resolution
37	<a href="#">c3ec6A_</a>	 Alignment	not modelled	46.4	11	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> general stress protein 26; <b>PDBTitle:</b> crystal structure of the general stress protein 26 from bacillus2 anthracis str. sterne
38	<a href="#">d2fhqa1</a>	 Alignment	not modelled	46.4	9	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
39	<a href="#">c3dmbA_</a>	 Alignment	not modelled	43.2	11	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> putative general stress protein 26 with a pnp-oxidase like <b>PDBTitle:</b> crystal structure of a putative general stress family protein2 (xcc2264) from xanthomonas campestris pv. campestris at 2.30 a3 resolution
40	<a href="#">c3db0B_</a>	 Alignment	not modelled	36.1	11	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> lin2891 protein; <b>PDBTitle:</b> crystal structure of putative pyridoxamine 5'-phosphate oxidase2 (np_472219.1) from listeria innocua at 2.00 a resolution
41	<a href="#">c3f7eB_</a>	 Alignment	not modelled	34.6	10	<b>PDB header:</b> unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> pyridoxamine 5'-phosphate oxidase-related, fmn- <b>PDBTitle:</b> msmeg_3380 f420 reductase
42	<a href="#">d1w9aa_</a>	 Alignment	not modelled	24.7	8	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
43	<a href="#">c3fkhB_</a>	 Alignment	not modelled	22.5	11	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> putative pyridoxamine 5'-phosphate oxidase; <b>PDBTitle:</b> crystal structure of putative pyridoxamine 5'-phosphate oxidase2 (np_601736.1) from corynebacterium glutamicum atcc 13032 kitasato at3 2.51 a resolution
44	<a href="#">d1xwz1</a>	 Alignment	not modelled	19.0	18	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Purple acid phosphatase, N-terminal domain <b>Family:</b> Purple acid phosphatase, N-terminal domain
45	<a href="#">d2arza1</a>	 Alignment	not modelled	17.4	15	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
46	<a href="#">d2hq9a1</a>	 Alignment	not modelled	16.2	6	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
47	<a href="#">c2ou5B_</a>	 Alignment	not modelled	11.6	12	<b>PDB header:</b> flavoprotein <b>Chain:</b> B: <b>PDB Molecule:</b> pyridoxamine 5'-phosphate oxidase-related, fmn-binding; <b>PDBTitle:</b> crystal structure of a pyridoxamine 5'-phosphate oxidase-related fmn-2 binding protein (jann_0254) from jannaschia sp. ccs1 at 1.60 a3 resolution
48	<a href="#">c2ig6B_</a>	 Alignment	not modelled	9.5	13	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> nimc/nima family protein; <b>PDBTitle:</b> crystal structure of a nimc/nima family protein (ca_c2569) from2 clostridium acetobutylicum at 1.80 a resolution
49	<a href="#">d2qfra1</a>	 Alignment	not modelled	9.2	11	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> Purple acid phosphatase, N-terminal domain <b>Family:</b> Purple acid phosphatase, N-terminal domain
50	<a href="#">c2iabB_</a>	 Alignment	not modelled	8.1	14	<b>PDB header:</b> unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> crystal structure of a protein with fmn-binding split barrel fold2 (np_828636.1) from streptomyces avermitilis at 2.00 a resolution
51	<a href="#">d2i02a1</a>	 Alignment	not modelled	7.9	13	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
52	<a href="#">d1mkya3</a>	 Alignment	not modelled	7.3	25	<b>Fold:</b> Alpha-lytic protease prodomain-like <b>Superfamily:</b> Probable GTPase Der, C-terminal domain <b>Family:</b> Probable GTPase Der, C-terminal domain

53	<a href="#">c3cp3A_</a>	Alignment	not modelled	7.3	13	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of conserved protein of unknown function dip18742 from corynebacterium diphtheriae
54	<a href="#">c1a2oB_</a>	Alignment	not modelled	7.1	17	<b>PDB header:</b> bacterial chemotaxis <b>Chain:</b> B: <b>PDB Molecule:</b> cheb methyltransferase; <b>PDBTitle:</b> structural basis for methyltransferase cheb regulation by a2 phosphorylation-activated domain
55	<a href="#">d1dmla2</a>	Alignment	not modelled	7.0	24	<b>Fold:</b> DNA clamp <b>Superfamily:</b> DNA clamp <b>Family:</b> DNA polymerase processivity factor
56	<a href="#">d2fg9a1</a>	Alignment	not modelled	6.3	15	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
57	<a href="#">c2hhzA_</a>	Alignment	not modelled	6.0	6	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> pyridoxamine 5'-phosphate oxidase-related; <b>PDBTitle:</b> crystal structure of a pyridoxamine 5'-phosphate oxidase-related2 protein (ssuidraft_2804) from streptococcus suis 89/1591 at 2.00 a3 resolution
58	<a href="#">d1svba1</a>	Alignment	not modelled	5.9	13	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> Class II viral fusion proteins C-terminal domain
59	<a href="#">c1mkyA_</a>	Alignment	not modelled	5.4	20	<b>PDB header:</b> ligand binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> probable gtp-binding protein enga; <b>PDBTitle:</b> structural analysis of the domain interactions in der, a2 switch protein containing two gtpase domains