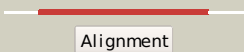

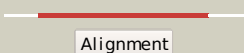

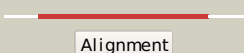

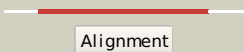

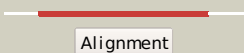

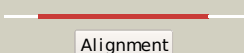

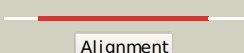

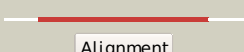

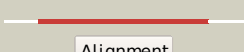

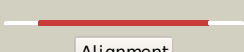
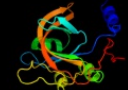
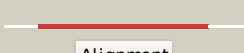




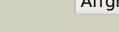
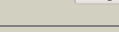
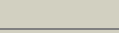



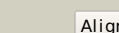
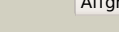

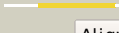
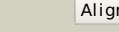

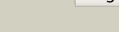
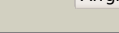

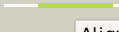








#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1ejea_	 Alignment		100.0	25	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: NADH:FMN oxidoreductase-like
2	c3hzmzA_	 Alignment		100.0	40	PDB header: oxidoreductase Chain: A: PDB Molecule: flavin reductase domain protein, fmN-binding; PDBTitle: crystal structure of a fmN-binding domain of flavin reductases-like2 enzyme (sbal_0626) from shewanella baltica os155 at 1.50 a resolution
3	c3bpbkB_	 Alignment		100.0	18	PDB header: oxidoreductase Chain: B: PDB Molecule: nitrilotriacetate monooxygenase component b; PDBTitle: crystal structure of nitrilotriacetate monooxygenase2 component b from bacillus cereus
4	c3fgeA_	 Alignment		100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: putative flavin reductase with split barrel domain; PDBTitle: crystal structure of putative flavin reductase with split barrel2 domain (yp_750721.1) from shewanella frigidimarina ncimb 400 at 1.743 a resolution
5	c2r6vA_	 Alignment		100.0	29	PDB header: flavoprotein Chain: A: PDB Molecule: uncharacterized protein ph0856; PDBTitle: crystal structure of fmN-binding protein (np_142786.1) from pyrococcus2 horikoshii at 1.35 a resolution
6	c3e4vA_	 Alignment		100.0	26	PDB header: flavoprotein Chain: A: PDB Molecule: nadh:fmN oxidoreductase like protein; PDBTitle: crystal structure of nadh:fmN oxidoreductase like protein in complex2 with fmN (yp_544701.1) from methylobacillus flagellatus kt at 1.40 a3 resolution
7	c2d5mA_	 Alignment		100.0	28	PDB header: electron transport Chain: A: PDB Molecule: flavoredoxin; PDBTitle: flavoredoxin of desulfovibrio vulgaris (miyazaki f)
8	c3bnkB_	 Alignment		100.0	26	PDB header: electron transport Chain: B: PDB Molecule: flavoredoxin; PDBTitle: x-ray crystal structure of flavoredoxin from methanosarcina2 acetivorans
9	d1lusca_	 Alignment		100.0	19	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: NADH:FMN oxidoreductase-like
10	c3k87B_	 Alignment		100.0	14	PDB header: oxidoreductase Chain: B: PDB Molecule: chlorophenol-4-monooxygenase component 1; PDBTitle: crystal structure of nadh:fad oxidoreductase (tftc) - fad2 complex
11	c3rh7A_	 Alignment		100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: hypothetical oxidoreductase; PDBTitle: crystal structure of a hypothetical oxidoreductase (sma0793) from2 sinorhizobium meliloti 1021 at 3.00 a resolution

12	c3pftA_	Alignment		100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: flavin reductase; PDBTitle: crystal structure of untagged c54a mutant flavin reductase (dszd) in2 complex with fmn from mycobacterium goodii
13	d1wgba_	Alignment		100.0	22	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: NADH:FMN oxidoreductase-like
14	c3nfwB_	Alignment		100.0	18	PDB header: oxidoreductase Chain: B: PDB Molecule: nitrilotriacetate monooxygenase component b; PDBTitle: crystal structure of nitrilotriacetate monooxygenase component b2 (a0r521 homolog) from mycobacterium thermoresistibile
15	c2r0xA_	Alignment		100.0	14	PDB header: oxidoreductase Chain: A: PDB Molecule: possible flavin reductase; PDBTitle: crystal structure of a putative flavin reductase (ycdh, hs_1225) from2 haemophilus somnus 129pt at 1.06 a resolution
16	c3cb0B_	Alignment		100.0	19	PDB header: oxidoreductase Chain: B: PDB Molecule: 4-hydroxyphenylacetate 3-monooxygenase; PDBTitle: cobr
17	c2qckA_	Alignment		100.0	15	PDB header: oxidoreductase Chain: A: PDB Molecule: flavin reductase domain protein; PDBTitle: crystal structure of flavin reductase domain protein (yp_831077.1)2 from arthrobacter sp. fb24 at 1.90 a resolution
18	d1i0ra_	Alignment		100.0	18	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: NADH:FMN oxidoreductase-like
19	d1rz0a_	Alignment		100.0	17	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: NADH:FMN oxidoreductase-like
20	c2d38A_	Alignment		100.0	15	PDB header: oxidoreductase Chain: A: PDB Molecule: hypothetical nadh-dependent fmn oxidoreductase; PDBTitle: the crystal structure of flavin reductase hpac complexed with nadp+
21	c2ecrA_	Alignment	not modelled	100.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: flavin reductase component (hpac) of 4-hydroxyphenylacetate PDBTitle: crystal structure of the ligand-free form of the flavin reductase2 component (hpac) of 4-hydroxyphenylacetate 3-monooxygenase
22	c3b5mD_	Alignment	not modelled	99.9	18	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of conserved uncharacterized protein from2 rhodopirellula baltica
23	d2imla1	Alignment	not modelled	99.6	14	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: MTH863-like
24	d2ptfa1	Alignment	not modelled	98.9	15	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: MTH863-like
25	c2ptfB_	Alignment	not modelled	98.9	14	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein mth_863; PDBTitle: crystal structure of protein mth_863 from methanobacterium2 thermoautotrophicum bound to fmn
26	d2nr4a1	Alignment	not modelled	98.7	13	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: MTH863-like
27	c2q9kA_	Alignment	not modelled	97.6	11	PDB header: oxidoreductase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative oxidoreductase (exig_1997) from2 exiguobacterium sibiricum 255-15 at 1.59 a resolution
28	d1flma_	Alignment	not modelled	96.1	10	Fold: Split barrel-like Superfamily: FMN-binding split barrel

						Family: PNP-oxidase like
29	c2htdB	 Alignment	not modelled	95.9	11	PDB header: oxidoreductase Chain: B: PDB Molecule: predicted flavin-nucleotide-binding protein from cog3576 PDBTitle: crystal structure of a putative pyridoxamine 5'-phosphate oxidase2 (ldb0262) from lactobacillus delbrueckii subsp. at 1.60 a resolution
30	d2asfa1	 Alignment	not modelled	95.4	8	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
31	d1vl7a	 Alignment	not modelled	94.7	16	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
32	c2re7A	 Alignment	not modelled	94.7	10	PDB header: oxidoreductase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a pyridoxamine 5'-phosphate oxidase related2 protein (psyc_0186) from psychrobacter arcticus 273-4 at 2.50 a3 resolution
33	d2hq7a1	 Alignment	not modelled	94.7	17	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
34	c2iabB	 Alignment	not modelled	94.4	6	PDB header: unknown function Chain: B: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a protein with fmN-binding split barrel fold2 (np_828636.1) from streptomyces avermitilis at 2.00 a resolution
35	c3f7eB	 Alignment	not modelled	93.7	7	PDB header: unknown function Chain: B: PDB Molecule: pyridoxamine 5'-phosphate oxidase-related, fmN- PDBTitle: msMeg_3380 f420 reductase
36	d2fhqa1	 Alignment	not modelled	93.3	13	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
37	c2hhzA	 Alignment	not modelled	93.2	14	PDB header: oxidoreductase Chain: A: PDB Molecule: pyridoxamine 5'-phosphate oxidase-related; PDBTitle: crystal structure of a pyridoxamine 5'-phosphate oxidase-related2 protein (ssuidraft_2804) from streptococcus suis 89/1591 at 2.00 a3 resolution
38	d1rfea	 Alignment	not modelled	92.4	7	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
39	d1w9aa	 Alignment	not modelled	92.1	3	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
40	d2i02a1	 Alignment	not modelled	87.9	11	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
41	c2htiA	 Alignment	not modelled	85.0	13	PDB header: fmN-binding protein Chain: A: PDB Molecule: bh0577 protein; PDBTitle: crystal structure of a flavin-nucleotide-binding protein (bh_0577)2 from bacillus halodurans at 2.50 a resolution
42	d2htia1	 Alignment	not modelled	85.0	13	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
43	d2fg9a1	 Alignment	not modelled	77.7	8	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
44	d2arza1	 Alignment	not modelled	77.5	8	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
45	c2ig6B	 Alignment	not modelled	77.5	13	PDB header: oxidoreductase Chain: B: PDB Molecule: nimc/nima family protein; PDBTitle: crystal structure of a nimc/nima family protein (ca_c2569) from2 clostridium acetobutylicum at 1.80 a resolution
46	c3dmbA	 Alignment	not modelled	73.4	10	PDB header: oxidoreductase Chain: A: PDB Molecule: putative general stress protein 26 with a pnp-oxidase like PDBTitle: crystal structure of a putative general stress family protein2 (xcc2264) from xanthomonas campestris pv. campestris at 2.30 a3 resolution
47	c3db0B	 Alignment	not modelled	70.9	13	PDB header: oxidoreductase Chain: B: PDB Molecule: lin2891 protein; PDBTitle: crystal structure of putative pyridoxamine 5'-phosphate oxidase2 (np_472219.1) from listeria innocua at 2.00 a resolution
48	d1xhna1	 Alignment	not modelled	62.7	8	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
49	c3ec6A	 Alignment	not modelled	62.7	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: general stress protein 26; PDBTitle: crystal structure of the general stress protein 26 from bacillus2 anthracis str. Sterne
50	c3dnhB	 Alignment	not modelled	60.2	13	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein atu2129; PDBTitle: the crystal structure of the protein atu2129 (unknown function) from2 agrobacterium tumefaciens str. c58
51	d1dnla	 Alignment	not modelled	56.2	11	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
52	d2hq9a1	 Alignment	not modelled	38.5	5	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
		 Alignment				PDB header: flavoprotein

53	c3h96B_	Alignment	not modelled	28.4	7	Chain: B: PDB Molecule: f420-h2 dependent reductase a; PDBTitle: msmeg_3358 f420 reductase
54	d1t9ma_	Alignment	not modelled	28.1	11	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
55	c3gasA_	Alignment	not modelled	25.9	8	PDB header: oxidoreductase Chain: A: PDB Molecule: heme oxygenase; PDBTitle: crystal structure of helicobacter pylori heme oxygenase hugz2 in complex with heme
56	d1ty9a_	Alignment	not modelled	23.7	19	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
57	d1nrga_	Alignment	not modelled	17.3	6	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
58	c1nrgA_	Alignment	not modelled	17.3	6	PDB header: oxidoreductase Chain: A: PDB Molecule: pyridoxine 5'-phosphate oxidase; PDBTitle: structure and properties of recombinant human pyridoxine-5'-phosphate2 oxidase
59	d2fura1	Alignment	not modelled	11.4	8	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
60	c3fkhB_	Alignment	not modelled	9.4	11	PDB header: oxidoreductase Chain: B: PDB Molecule: putative pyridoxamine 5'-phosphate oxidase; PDBTitle: crystal structure of putative pyridoxamine 5'-phosphate oxidase2 (np_601736.1) from corynebacterium glutamicum atcc 13032 kitasato at3 2.51 a resolution
61	c2qeaB_	Alignment	not modelled	9.4	8	PDB header: oxidoreductase Chain: B: PDB Molecule: putative general stress protein 26; PDBTitle: crystal structure of a putative general stress protein 26 (jann_0955)2 from jannaschia sp. ccs1 at 2.46 a resolution
62	c2ou5B_	Alignment	not modelled	7.5	6	PDB header: flavoprotein Chain: B: PDB Molecule: pyridoxamine 5'-phosphate oxidase-related, fmn-binding; PDBTitle: crystal structure of a pyridoxamine 5'-phosphate oxidase-related fmn-2 binding protein (jann_0254) from jannaschia sp. ccs1 at 1.60 a3 resolution
63	c3in6A_	Alignment	not modelled	7.4	15	PDB header: flavoprotein Chain: A: PDB Molecule: fmn-binding protein; PDBTitle: crystal structure of a fmn-binding protein (swol_0183) from2 syntrophomonas wolfei subsp. wolfei at 2.12 a resolution
64	d1vlma_	Alignment	not modelled	6.3	30	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: UbiE/COQ5-like
65	c1kl9A_	Alignment	not modelled	6.3	17	PDB header: translation Chain: A: PDB Molecule: eukaryotic translation initiation factor 2 subunit 1; PDBTitle: crystal structure of the n-terminal segment of human eukaryotic2 initiation factor 2alpha
66	c1u24A_	Alignment	not modelled	5.8	22	PDB header: hydrolase Chain: A: PDB Molecule: myo-inositol hexaphosphate phosphohydrolase; PDBTitle: crystal structure of selenomonas ruminantium phytase
67	c1q8kA_	Alignment	not modelled	5.8	14	PDB header: translation Chain: A: PDB Molecule: eukaryotic translation initiation factor 2 PDBTitle: solution structure of alpha subunit of human eif2
68	c3e23A_	Alignment	not modelled	5.6	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein rpa2492; PDBTitle: crystal structure of the rpa2492 protein in complex with2 sam from rhodopseudomonas palustris, northeast structural3 genomics consortium target rpr299
69	d1f8ya_	Alignment	not modelled	5.5	19	Fold: Flavodoxin-like Superfamily: N-(deoxy)ribosyltransferase-like Family: N-deoxyribosyltransferase
70	d1kl9a2	Alignment	not modelled	5.3	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
71	c2zfuA_	Alignment	not modelled	5.1	29	PDB header: nuclear protein Chain: A: PDB Molecule: cerebral protein 1; PDBTitle: structure of the methyltransferase-like domain of nucleomethylin