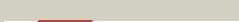
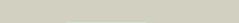
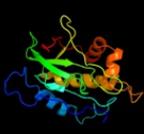


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P17846
Date	Thu Jan 5 11:36:18 GMT 2012
Unique Job ID	86e2e456c6a8d4b9

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1zj8B_	 Alignment		100.0	22	PDB header: oxidoreductase Chain: B: PDB Molecule: probable ferredoxin-dependent nitrite reductase nira; PDBTitle: structure of mycobacterium tuberculosis nira protein
2	c2akjA_	 Alignment		100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: ferredoxin--nitrite reductase, chloroplast; PDBTitle: structure of spinach nitrite reductase
3	c5aopA_	 Alignment		100.0	100	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite reductase hemoprotein; PDBTitle: sulfite reductase structure reduced with crii edta, 5-coordinate2 siroheme, siroheme feii, [4fe-4s] +1
4	c2v4jA_	 Alignment		100.0	16	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite reductase, dissimilatory-type subunit PDBTitle: the crystal structure of desulfovibrio vulgaris2 dissimilatory sulfite reductase bound to dsrC provides3 novel insights into the mechanism of sulfate respiration
5	c2v4jE_	 Alignment		100.0	17	PDB header: oxidoreductase Chain: E: PDB Molecule: sulfite reductase, dissimilatory-type subunit PDBTitle: the crystal structure of desulfovibrio vulgaris2 dissimilatory sulfite reductase bound to dsrC provides3 novel insights into the mechanism of sulfate respiration
6	c3c7bE_	 Alignment		100.0	15	PDB header: oxidoreductase Chain: E: PDB Molecule: sulfite reductase, dissimilatory-type subunit beta; PDBTitle: structure of the dissimilatory sulfite reductase from archaeoglobus2 fulgidus
7	c3c7bA_	 Alignment		100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite reductase, dissimilatory-type subunit alpha; PDBTitle: structure of the dissimilatory sulfite reductase from archaeoglobus2 fulgidus
8	d1aopa3	 Alignment		100.0	100	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
9	d1aopa4	 Alignment		100.0	100	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
10	d1zj8a2	 Alignment		100.0	19	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
11	d2akja4	 Alignment		100.0	27	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like

12	d1zj8a4	Alignment		100.0	25	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
13	d2akja2	Alignment		100.0	24	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
14	d1zj8a3	Alignment		100.0	25	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
15	d3c7bb3	Alignment		100.0	16	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
16	d2v4jb3	Alignment		100.0	16	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
17	d3c7ba3	Alignment		100.0	18	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
18	d2v4ja3	Alignment		100.0	14	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
19	d2akja3	Alignment		100.0	22	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
20	d3c7bb2	Alignment		99.8	11	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: DsrA/DsrB N-terminal-domain-like
21	d1zj8a1	Alignment	not modelled	99.8	15	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
22	d1aopa1	Alignment	not modelled	99.8	98	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
23	d2v4jb2	Alignment	not modelled	99.8	11	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: DsrA/DsrB N-terminal-domain-like
24	d1aopa2	Alignment	not modelled	99.7	100	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
25	d2akja1	Alignment	not modelled	99.7	14	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SiR/NiR-like domains 1 and 3
26	c3noyA_	Alignment	not modelled	99.7	22	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxy-3-methylbut-2-en-1-yl di phosphate synthase; PDBTitle: crystal structure of ispg (gcpe)
27	d3c7ba2	Alignment	not modelled	98.9	18	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: DsrA/DsrB N-terminal-domain-like
28	c2y0fD_	Alignment	not modelled	98.4	21	PDB header: oxidoreductase Chain: D: PDB Molecule: 4-hydroxy-3-methylbut-2-en-1-yl di phosphate synthase; PDBTitle: structure of gcpe (ispg) from thermus thermophilus hb27
29	d2v4ja2	Alignment	not modelled	97.9	14	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like

						Family:DsrA/DsrB N-terminal-domain-like
30	d1f37b_	Alignment	not modelled	78.7	22	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioredoxin-like 2Fe-2S ferredoxin
31	d2fug21	Alignment	not modelled	78.1	21	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: NQO2-like
32	c3nqoB_	Alignment	not modelled	73.0	11	PDB header: transcription Chain: B: PDB Molecule: marr-family transcriptional regulator; PDBTitle: crystal structure of a marr family transcriptional regulator (cd1569)2 from clostridium difficile 630 at 2.20 a resolution
33	c2nyxB_	Alignment	not modelled	67.9	10	PDB header: transcription Chain: B: PDB Molecule: probable transcriptional regulatory protein, rv1404; PDBTitle: crystal structure of rv1404 from mycobacterium tuberculosis
34	d1m2da_	Alignment	not modelled	61.4	28	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioredoxin-like 2Fe-2S ferredoxin
35	d3broa1	Alignment	not modelled	58.7	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
36	c3nrvc_	Alignment	not modelled	58.5	15	PDB header: transcription regulator Chain: C: PDB Molecule: putative transcriptional regulator (marr/emrr family); PDBTitle: crystal structure of marr/emrr family transcriptional regulator from2 acinetobacter sp. adp1
37	d1lnwa_	Alignment	not modelled	56.2	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
38	c2nnnB_	Alignment	not modelled	54.4	22	PDB header: transcription Chain: B: PDB Molecule: probable transcriptional regulator; PDBTitle: crystal structure of probable transcriptional regulator from2 pseudomonas aeruginosa
39	d1s3ja_	Alignment	not modelled	54.3	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
40	d2etha1	Alignment	not modelled	48.0	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
41	c3k0lA_	Alignment	not modelled	47.4	19	PDB header: transcription regulator Chain: A: PDB Molecule: repressor protein; PDBTitle: crystal structure of putative marr family transcriptional2 regulator from acinetobacter sp. adp
42	c3g3zA_	Alignment	not modelled	47.4	15	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator, marr family; PDBTitle: the structure of nmb1585, a marr family regulator from neisseria2 meningitidis
43	c3bpxB_	Alignment	not modelled	45.7	10	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator; PDBTitle: crystal structure of marr
44	d1ve4a1	Alignment	not modelled	44.8	13	Fold: Periplasmic binding protein-like II Superfamily: Periplasmic binding protein-like II Family: Phosphate binding protein-like
45	d2bv6a1	Alignment	not modelled	43.4	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
46	d1p4xa2	Alignment	not modelled	41.8	7	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
47	d1z7me1	Alignment	not modelled	40.8	7	Fold: Periplasmic binding protein-like II Superfamily: Periplasmic binding protein-like II Family: Phosphate binding protein-like
48	c3e6mD_	Alignment	not modelled	39.5	14	PDB header: transcription regulator Chain: D: PDB Molecule: marr family transcriptional regulator; PDBTitle: the crystal structure of a marr family transcriptional2 regulator from silicibacter pomeroyi dss.
49	c3bjaA_	Alignment	not modelled	39.3	11	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, marr family, putative; PDBTitle: crystal structure of putative marr-like transcription regulator2 (np_978771.1) from bacillus cereus atcc 10987 at 2.38 a resolution
50	d1xdpa1	Alignment	not modelled	38.6	15	Fold: Spectrin repeat-like Superfamily: PPK N-terminal domain-like Family: PPK N-terminal domain-like
51	c3bj6B_	Alignment	not modelled	37.6	13	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: crystal structure of marr family transcription regulator sp03579
52	c3ereD_	Alignment	not modelled	36.8	15	PDB header: dna binding protein/dna Chain: D: PDB Molecule: arginine repressor; PDBTitle: crystal structure of the arginine repressor protein from mycobacterium2 tuberculosis in complex with the dna operator
53	c1b4aA_	Alignment	not modelled	36.4	7	PDB header: repressor Chain: A: PDB Molecule: arginine repressor; PDBTitle: structure of the arginine repressor from bacillus stearothermophilus
54	d2a61a1	Alignment	not modelled	35.0	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
						Fold: DNA/RNA-binding 3-helical bundle

55	d2fbha1	Alignment	not modelled	34.8	18	Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
56	d2fbia1	Alignment	not modelled	32.6	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
57	d1nh8a1	Alignment	not modelled	31.4	11	Fold: Periplasmic binding protein-like II Superfamily: Periplasmic binding protein-like II Family: Phosphate binding protein-like
58	c1nh7A_	Alignment	not modelled	31.4	11	PDB header: transferase Chain: A: PDB Molecule: atp phosphoribosyltransferase; PDBTitle: atp phosphoribosyltransferase (atp-prtase) from mycobacterium2 tuberculosis
59	d1c0aa2	Alignment	not modelled	31.3	15	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
60	d1xxaa_	Alignment	not modelled	30.9	9	Fold: DCoH-like Superfamily: C-terminal domain of arginine repressor Family: C-terminal domain of arginine repressor
61	c3cagF_	Alignment	not modelled	29.8	15	PDB header: dna binding protein Chain: F: PDB Molecule: arginine repressor; PDBTitle: crystal structure of the oligomerization domain hexamer of the2 arginine repressor protein from mycobacterium tuberculosis in complex3 with 9 arginines.
62	c2auvA_	Alignment	not modelled	28.3	15	PDB header: oxidoreductase Chain: A: PDB Molecule: potential nad-reducing hydrogenase subunit; PDBTitle: solution structure of hndac : a thioredoxin-like [2fe-2s]2 ferredoxin involved in the nadp-reducing hydrogenase3 complex
63	c2fxaB_	Alignment	not modelled	28.3	10	PDB header: transcription Chain: B: PDB Molecule: protease production regulatory protein hpr; PDBTitle: structure of the protease production regulatory protein hpr from2 bacillus subtilis.
64	d1lj9a_	Alignment	not modelled	26.6	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
65	d2o8ra1	Alignment	not modelled	26.6	17	Fold: Spectrin repeat-like Superfamily: PPK N-terminal domain-like Family: PPK N-terminal domain-like
66	c1rlgB_	Alignment	not modelled	26.3	57	PDB header: toxin Chain: B: PDB Molecule: neurotoxin bmk37; PDBTitle: crystal structure of the scorpion toxin bmbktx1
67	d1rlga_	Alignment	not modelled	26.3	57	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Scorpion toxin-like Family: Short-chain scorpion toxins
68	c1rlgA_	Alignment	not modelled	26.3	57	PDB header: toxin Chain: A: PDB Molecule: neurotoxin bmk37; PDBTitle: crystal structure of the scorpion toxin bmbktx1
69	d1b5ta_	Alignment	not modelled	26.1	12	Fold: TIM beta/alpha-barrel Superfamily: FAD-linked oxidoreductase Family: Methylenetetrahydrofolate reductase
70	d1olta_	Alignment	not modelled	25.9	10	Fold: TIM beta/alpha-barrel Superfamily: Radical SAM enzymes Family: Oxygen-independent coproporphyrinogen III oxidase HemN
71	d2r48a1	Alignment	not modelled	24.3	38	Fold: Phosphotyrosine protein phosphatases I-like Superfamily: PTS system IIB component-like Family: PTS system, Fructose specific IIB subunit-like
72	c2qwwB_	Alignment	not modelled	24.0	16	PDB header: transcription Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: crystal structure of multiple antibiotic-resistance repressor (marr)2 (yp_013417.1) from listeria monocytogenes 4b f2365 at 2.07 a3 resolution
73	d1zhva2	Alignment	not modelled	23.9	9	Fold: Ferredoxin-like Superfamily: ACT-like Family: Atu0741-like
74	d1qrib1	Alignment	not modelled	23.8	25	Fold: Acyl carrier protein-like Superfamily: Retrovirus capsid dimerization domain-like Family: Retrovirus capsid protein C-terminal domain
75	c3cdhB_	Alignment	not modelled	22.5	7	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: crystal structure of the marr family transcriptional regulator spo14532 from silicibacter pomeroyi dss-3
76	c1p4xA_	Alignment	not modelled	21.9	10	PDB header: transcription Chain: A: PDB Molecule: staphylococcal accessory regulator a homologue; PDBTitle: crystal structure of sars protein from staphylococcus aureus
77	d1z9ia1	Alignment	not modelled	21.8	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
78	d2r4qa1	Alignment	not modelled	21.5	50	Fold: Phosphotyrosine protein phosphatases I-like Superfamily: PTS system IIB component-like Family: PTS system, Fructose specific IIB subunit-like
79	d1hsja1	Alignment	not modelled	20.6	7	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
80	d1s4ea2	Alignment	not modelled	20.2	16	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Galactokinase
						PDB header: transferase

81	c2kyrA_	Alignment	not modelled	19.9	25	Chain: A: PDB Molecule: fructose-like phosphotransferase enzyme iib component 1; PDBTitle: solution structure of enzyme iib subunit of pts system from2 escherichia coli k12. northeast structural genomics consortium target3 er315/ontario center for structural proteomics target ec0544
82	c3lx4B_	Alignment	not modelled	19.6	23	PDB header: oxidoreductase Chain: B: PDB Molecule: fe-hydrogenase; PDBTitle: stepwise [fefe]-hydrogenase h-cluster assembly revealed in the2 structure of hyda(deltaefg)
83	d1t6sa1	Alignment	not modelled	19.3	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: ScpB/YpuH-like
84	d1jgsa_	Alignment	not modelled	19.1	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
85	c2vd2A_	Alignment	not modelled	19.1	17	PDB header: transferase Chain: A: PDB Molecule: atp phosphoribosyltransferase; PDBTitle: the crystal structure of hisg from b. subtilis
86	d1piea2	Alignment	not modelled	19.0	16	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Galactokinase
87	c1xdoB_	Alignment	not modelled	19.0	15	PDB header: transferase Chain: B: PDB Molecule: polyphosphate kinase; PDBTitle: crystal structure of escherichia coli polyphosphate kinase
88	d2p5ma1	Alignment	not modelled	18.7	11	Fold: DCoH-like Superfamily: C-terminal domain of arginine repressor Family: C-terminal domain of arginine repressor
89	d1ffgb_	Alignment	not modelled	18.4	13	Fold: Ferredoxin-like Superfamily: CheY-binding domain of CheA Family: CheY-binding domain of CheA
90	c3cjnA_	Alignment	not modelled	18.4	16	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, marr family; PDBTitle: crystal structure of transcriptional regulator, marr family, from2 silicibacter pomeroyi
91	c3oopA_	Alignment	not modelled	18.2	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lin2960 protein; PDBTitle: the structure of a protein with unknown function from listeria innocua2 clip11262
92	c1zhvA_	Alignment	not modelled	17.8	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein atu0741; PDBTitle: x-ray crystal structure protein atu0741 from agobacterium tumefaciens.2 northeast structural genomics consortium target atr8.
93	d1jvaa3	Alignment	not modelled	17.7	15	Fold: Homing endonuclease-like Superfamily: Homing endonucleases Family: Intein endonuclease
94	c3hrmA_	Alignment	not modelled	17.6	8	PDB header: transcription regulator Chain: A: PDB Molecule: hth-type transcriptional regulator sarz; PDBTitle: crystal structure of staphylococcus aureus protein sarz in sulfenic2 acid form
95	d1l0wa2	Alignment	not modelled	17.2	16	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
96	d1we6a_	Alignment	not modelled	16.7	16	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ubiquitin-related
97	d1a8oa_	Alignment	not modelled	15.6	33	Fold: Acyl carrier protein-like Superfamily: Retrovirus capsid dimerization domain-like Family: Retrovirus capsid protein C-terminal domain
98	c3v4gA_	Alignment	not modelled	15.4	11	PDB header: dna binding protein Chain: A: PDB Molecule: arginine repressor; PDBTitle: 1.60 angstrom resolution crystal structure of an arginine repressor2 from vibrio vulnificus cmcp6
99	d2eiaa1	Alignment	not modelled	15.0	33	Fold: Acyl carrier protein-like Superfamily: Retrovirus capsid dimerization domain-like Family: Retrovirus capsid protein C-terminal domain