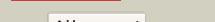
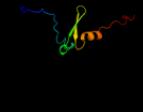
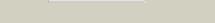
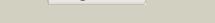
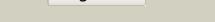
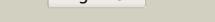
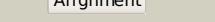
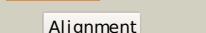
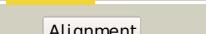
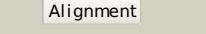
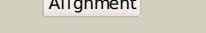
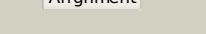
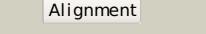
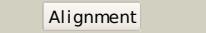
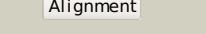
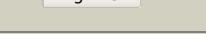
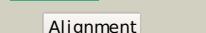


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P08365
Date	Thu Jan 5 11:01:12 GMT 2012
Unique Job ID	c021fd3c821ea65c

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1ub4c_			99.9	32	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: Kis/PemI addiction antidote
2	d1mvfd_			99.6	36	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: Kis/PemI addiction antidote
3	c3zvkG_			98.6	16	PDB header: antitoxin/toxin/dna Chain: G; PDB Molecule: antitoxin of toxin-antitoxin system vapb; PDBTitle: crystal structure of vapbc2 from rickettsia felis bound to a dna fragment from their promoter
4	c3tndF_			98.2	20	PDB header: translation, toxin Chain: F; PDB Molecule: antitoxin vapb; PDBTitle: crystal structure of shigella flexneri vapbc toxin-antitoxin complex
5	d1yfba1			97.0	23	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: AbrB N-terminal domain-like
6	d2fy9a1			96.9	21	Fold: Double-split beta-barrel Superfamily: AbrB/MazE/MraZ-like Family: AbrB N-terminal domain-like
7	c2w1tB_			96.8	24	PDB header: transcription Chain: B; PDB Molecule: stage v sporulation protein t; PDBTitle: crystal structure of b. subtilis spovt
8	c2166B_			96.0	15	PDB header: transcription regulator Chain: B; PDB Molecule: transcriptional regulator, abrb family; PDBTitle: the dna-recognition fold of sso7c4 suggests a new member of spovt-abrb2 superfamily from archaea.
9	c2ro5B_			95.9	28	PDB header: transcription Chain: B; PDB Molecule: stage v sporulation protein t; PDBTitle: rdc-refined solution structure of the n-terminal dna2 recognition domain of the bacillus subtilis transition-3 state regulator spovt
10	c2glwA_			93.4	21	PDB header: transcription Chain: A; PDB Molecule: 92aa long hypothetical protein; PDBTitle: the solution structure of phs018 from pyrococcus horikoshii
11	c3o27B_			93.1	17	PDB header: dna binding protein Chain: B; PDB Molecule: putative uncharacterized protein; PDBTitle: the crystal structure of c68 from the hybrid virus-plasmid pssv

12	c2pjhB			83.2	24	PDB header: transport protein Chain: B; PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: strctural model of the p97 n domain- npl4 ubd complex	
13	c1cz5A			77.2	23	PDB header: hydrolase Chain: A; PDB Molecule: vcp-like atpase; PDBTitle: nmr structure of vat-n: the n-terminal domain of vat (vcp-2 like atpase of thermoplasma)	
14	d2d9ra1			76.0	22	Fold: Double-split beta-barrel Superfamily: AF2212/PG0164-like Family: PG0164-like	
15	d1cz5a1			72.6	18	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like	
16	d1h0ha1			59.5	10	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain	
17	d2jioa1			59.3	16	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain	
18	d2iv2x1			58.9	14	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain	
19	d1zq1a1			56.5	19	Fold: Sm-like fold Superfamily: GatD N-terminal domain-like Family: GatD N-terminal domain-like	
20	c1h9mB			55.9	29	PDB header: binding protein Chain: B; PDB Molecule: molybdenum-binding-protein; PDBTitle: two crystal structures of the cytoplasmic molybdate-binding2 protein modg suggest a novel cooperative binding mechanism3 and provide insights into ligand-binding specificity.4 peg-grown form with molybdate bound	
21	d1vlfm1		Alignment	not modelled	52.8	19	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
22	d2vbua1		Alignment	not modelled	52.3	16	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin kinase-like Family: CTP-dependent riboflavin kinase-like
23	d1g8ka1		Alignment	not modelled	52.1	16	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
24	d1e32a1		Alignment	not modelled	51.7	17	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
25	d3d31a1		Alignment	not modelled	46.4	19	Fold: OB-fold Superfamily: MOP-like Family: ABC-transporter additional domain
26	d1tmoa1		Alignment	not modelled	45.3	19	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
27	d1eu1a1		Alignment	not modelled	45.1	10	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
28	d1ogy1a1		Alignment	not modelled	44.1	10	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
							Fold: Double psi beta-barrel

29	d1kqfa1		Alignment	not modelled	43.9	9	Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
30	c2ki8A_		Alignment	not modelled	43.5	19	PDB header: oxidoreductase Chain: A: PDB Molecule: tungsten formylmethanofuran dehydrogenase, PDBTitle: solution nmr structure of tungsten formylmethanofuran2 dehydrogenase subunit d from archaeoglobus fulgidus,3 northeast structural genomics consortium target att7
31	d1h9ma1		Alignment	not modelled	42.7	26	Fold: OB-fold Superfamily: MOP-like Family: BiMOP, duplicated molybdate-binding domain
32	c2iv2X_		Alignment	not modelled	42.4	14	PDB header: oxidoreductase Chain: X: PDB Molecule: formate dehydrogenase h; PDBTitle: reinterpretation of reduced form of formate dehydrogenase h2 from e. coli
33	c1wlfa_		Alignment	not modelled	41.9	23	PDB header: protein transport Chain: A: PDB Molecule: peroxisome biogenesis factor 1; PDBTitle: structure of the n-terminal domain of pex1 aaa-atpase:2 characterization of a putative adaptor-binding domain
34	d1h9ma2		Alignment	not modelled	38.6	29	Fold: OB-fold Superfamily: MOP-like Family: BiMOP, duplicated molybdate-binding domain
35	d1dmra1		Alignment	not modelled	38.4	10	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
36	d1y5ia1		Alignment	not modelled	37.3	18	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
37	d1fr3a_		Alignment	not modelled	36.6	24	Fold: OB-fold Superfamily: MOP-like Family: Molybdate/tungstate binding protein MOP
38	c2v45A_		Alignment	not modelled	33.3	16	PDB header: oxidoreductase Chain: A: PDB Molecule: periplasmic nitrate reductase; PDBTitle: a new catalytic mechanism of periplasmic nitrate reductase2 from desulfovibrio desulfuricans atcc 27774 from3 crystallographic and epr data and based on detailed4 analysis of the sixth ligand
39	c2k5IA_		Alignment	not modelled	33.1	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: feoa; PDBTitle: solution nmr structure of protein feoa from clostridium2 thermocellum, northeast structural genomics consortium3 target cmr17
40	d1wlfa2		Alignment	not modelled	28.3	23	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like
41	c1g8jC_		Alignment	not modelled	27.9	15	PDB header: oxidoreductase Chain: C: PDB Molecule: arsenate oxidase; PDBTitle: crystal structure analysis of arsenite oxidase from2 alcaligenes faecalis
42	d1guta_		Alignment	not modelled	27.4	23	Fold: OB-fold Superfamily: MOP-like Family: Molybdate/tungstate binding protein MOP
43	d1h9ra1		Alignment	not modelled	27.0	17	Fold: OB-fold Superfamily: MOP-like Family: BiMOP, duplicated molybdate-binding domain
44	d2d6fa1		Alignment	not modelled	26.0	8	Fold: Sm-like fold Superfamily: GatD N-terminal domain-like Family: GatD N-terminal domain-like
45	c2nyaF_		Alignment	not modelled	25.2	19	PDB header: oxidoreductase Chain: F: PDB Molecule: periplasmic nitrate reductase; PDBTitle: crystal structure of the periplasmic nitrate reductase2 (nap) from escherichia coli
46	c3cf1C_		Alignment	not modelled	24.6	24	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97/vcp in complex with adp/adp.alfx
47	c1vlfQ_		Alignment	not modelled	23.6	19	PDB header: oxidoreductase Chain: Q: PDB Molecule: pyrogallol hydroxytransferase large subunit; PDBTitle: crystal structure of pyrogallol-phloroglucinol2 transhydroxylase from pelobacter acidigallici complexed3 with inhibitor 1,2,4,5-tetrahydroxy-benzene
48	c2e7zA_		Alignment	not modelled	23.6	16	PDB header: lyase Chain: A: PDB Molecule: acetylene hydratase ahv; PDBTitle: acetylene hydratase from pelobacter acetylénicus
49	d1ylea1		Alignment	not modelled	23.1	18	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: Asta-like
50	c1kqgA_		Alignment	not modelled	22.8	10	PDB header: oxidoreductase Chain: A: PDB Molecule: formate dehydrogenase, nitrate-inducible, major subunit PDBTitle: formate dehydrogenase n from e. coli
51	c1gw1A_		Alignment	not modelled	22.6	17	PDB header: gene regulation Chain: A: PDB Molecule: diphtheria toxin repressor; PDBTitle: solution structure of the c-terminal domain of dtxr2 residues 110-226
52	c3d31B_		Alignment	not modelled	22.3	19	PDB header: transport protein Chain: B: PDB Molecule: sulfate/molybdate abc transporter, atp-binding PDBTitle: modbc from methanoscincina acetivorans
53	c2k5hA_		Alignment	not modelled	21.9	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein; PDBTitle: solution nmr structure of protein encoded by nth693 from2 methanobacterium thermoautotrophicum: northeast

						structural3 genomics consortium target tt824a
54	c1eu1A	Alignment	not modelled	21.7	10	PDB header: oxidoreductase Chain: A: PDB Molecule: dimethyl sulfoxide reductase; PDBTitle: the crystal structure of rhodobacter sphaeroides dimethylsulfoxide2 reductase reveals two distinct molybdenum coordination environments.
55	c2he4A	Alignment	not modelled	21.5	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: na(+)/h(+) exchange regulatory cofactor nhe-rf2; PDBTitle: the crystal structure of the second pdz domain of human2 nherf-2 (slc9a3r2) interacting with a mode 1 pdz binding3 motif
56	c1tmoA	Alignment	not modelled	20.9	19	PDB header: oxidoreductase Chain: A: PDB Molecule: trimethylamine n-oxide reductase; PDBTitle: trimethylamine n-oxide reductase from shewanella massilia
57	c3qgID	Alignment	not modelled	20.6	16	PDB header: protein binding Chain: D: PDB Molecule: sorting nexin-27; PDBTitle: crystal structure of pdz domain of sorting nexin 27 (snx27) in complex2 with the eseskv peptide corresponding to the c-terminal tail of girk3
58	c1y5iA	Alignment	not modelled	20.5	18	PDB header: oxidoreductase Chain: A: PDB Molecule: respiratory nitrate reductase 1 alpha chain; PDBTitle: the crystal structure of the narghi mutant nari-k86a
59	c1h0hA	Alignment	not modelled	20.4	10	PDB header: dehydrogenase Chain: A: PDB Molecule: formate dehydrogenase (large subunit); PDBTitle: tungsten containing formate dehydrogenase from2 desulfovibrio gigas
60	c1s3sA	Alignment	not modelled	19.5	19	PDB header: protein binding Chain: A: PDB Molecule: transitional endoplasmic reticulum atpase (ter PDBTitle: crystal structure of aaa atpase p97/vcp nd1 in complex with2 p47 c
61	c1ogyA	Alignment	not modelled	18.6	10	PDB header: oxidoreductase Chain: A: PDB Molecule: periplasmic nitrate reductase; PDBTitle: crystal structure of the heterodimeric nitrate reductase2 from rhodobacter sphaeroides
62	c1h5nC	Alignment	not modelled	18.5	10	PDB header: oxidoreductase Chain: C: PDB Molecule: dmsr reductase; PDBTitle: dmsr reductase modified by the presence of dms and air
63	c3hu2C	Alignment	not modelled	18.3	24	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97 n-d1 r86a mutant in complex with atpgs
64	c2k4yA	Alignment	not modelled	17.2	13	PDB header: metal transport Chain: A: PDB Molecule: feoa-like protein; PDBTitle: nmr structure of feoa-like protein from clostridium2 acetobutylicum: northeast structural genomics consortium3 target car178
65	d1a62a2	Alignment	not modelled	17.1	11	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
66	c2jilA	Alignment	not modelled	16.8	31	PDB header: membrane protein Chain: A: PDB Molecule: glutamate receptor interacting protein-1; PDBTitle: crystal structure of 2nd pdz domain of glutamate receptor2 interacting protein-1 (rip1)
67	c1zeqX	Alignment	not modelled	16.4	21	PDB header: metal binding protein Chain: X: PDB Molecule: cation efflux system protein cuf; PDBTitle: 1.5 a structure of apo-cuf residues 6-88 from escherichia coli
68	c2dxbR	Alignment	not modelled	16.4	29	PDB header: hydrolase Chain: R: PDB Molecule: thiocyanate hydrolase subunit gamma; PDBTitle: recombinant thiocyanate hydrolase comprising partially-modified cobalt2 centers
69	c1uheA	Alignment	not modelled	16.2	26	PDB header: lyase Chain: A: PDB Molecule: aspartate 1-decarboxylase alpha chain; PDBTitle: crystal structure of aspartate decarboxylase, isoasparagine complex
70	d2exdal	Alignment	not modelled	16.2	25	Fold: OB-fold Superfamily: NfeD domain-like Family: NfeD domain-like
71	d2byga1	Alignment	not modelled	15.4	31	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
72	d1qvpa	Alignment	not modelled	14.5	17	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: FeoA-like
73	d1qw1a1	Alignment	not modelled	14.3	18	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: FeoA-like
74	d1v29a	Alignment	not modelled	13.6	30	Fold: Nitrile hydratase alpha chain Superfamily: Nitrile hydratase alpha chain Family: Nitrile hydratase alpha chain
75	c2qt7B	Alignment	not modelled	13.6	16	PDB header: hydrolase Chain: B: PDB Molecule: receptor-type tyrosine-protein phosphatase-like PDBTitle: crystallographic structure of the mature ectodomain of the2 human receptor-type protein-tyrosine phosphatase ia-2 at3 1.30 angstroms
76	c2fugC	Alignment	not modelled	13.5	10	PDB header: oxidoreductase Chain: C: PDB Molecule: nadh-quinone oxidoreductase chain 3; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
77	c3idwA	Alignment	not modelled	13.5	33	PDB header: endocytosis Chain: A: PDB Molecule: actin cytoskeleton-regulatory complex protein sla1; PDBTitle: crystal structure of sla1 homology domain 2 Fold: PDZ domain-like

78	d2i6va1	Alignment	not modelled	13.2	20	Superfamily: PDZ domain-like Family: EpsC C-terminal domain-like
79	c3piyB	Alignment	not modelled	13.0	22	PDB header: transcription regulator Chain: B: PDB Molecule: hypothetical signal peptide protein; PDBTitle: crystal structure of a putative transcription regulator (r01717) from2 sinorhizobium meliloti 1021 at 1.55 a resolution
80	c3qyhG	Alignment	not modelled	12.9	20	PDB header: lyase Chain: G: PDB Molecule: co-type nitrile hydratase alpha subunit; PDBTitle: crystal structure of co-type nitrile hydratase beta-h71l from2 pseudomonas putida.
81	d2fe5a1	Alignment	not modelled	12.9	38	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
82	d2qdyal	Alignment	not modelled	12.8	20	Fold: Nitrile hydratase alpha chain Superfamily: Nitrile hydratase alpha chain Family: Nitrile hydratase alpha chain
83	c3plxb	Alignment	not modelled	12.7	13	PDB header: lyase Chain: B: PDB Molecule: aspartate 1-decarboxylase; PDBTitle: the crystal structure of aspartate alpha-decarboxylase from2 campylobacter jejuni subsp. jejuni nctc 11168
84	c2ivfA	Alignment	not modelled	12.5	9	PDB header: oxidoreductase Chain: A: PDB Molecule: ethylbenzene dehydrogenase alpha-subunit; PDBTitle: ethylbenzene dehydrogenase from aromatoleum aromaticum
85	c1vc3B	Alignment	not modelled	12.0	16	PDB header: lyase Chain: B: PDB Molecule: l-aspartate-alpha-decarboxylase heavy chain; PDBTitle: crystal structure of l-aspartate-alpha-decarboxylase
86	c2c45F	Alignment	not modelled	12.0	23	PDB header: lyase Chain: F: PDB Molecule: aspartate 1-decarboxylase precursor; PDBTitle: native precursor of pyruvyl dependent aspartate2 decarboxylase
87	d1iz6a2	Alignment	not modelled	11.9	21	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
88	c2komA	Alignment	not modelled	11.5	31	PDB header: signaling protein Chain: A: PDB Molecule: partitioning defective 3 homolog; PDBTitle: solution structure of humar par-3b pdz2 (residues 451-549)
89	d1x5qa1	Alignment	not modelled	11.3	25	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
90	d2i4sa1	Alignment	not modelled	11.3	20	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: EpsC C-terminal domain-like
91	d2cqaa1	Alignment	not modelled	11.3	12	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: TIP49 domain
92	c3m7aA	Alignment	not modelled	11.2	32	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of saro_0823 (yp_496102.1) a protein of2 unknown function from novosphingobium aromaticivorans dsm3 12444 at 1.22 a resolution
93	c2jxoA	Alignment	not modelled	11.1	19	PDB header: protein binding Chain: A: PDB Molecule: ezrin-radixin-moesin-binding phosphoprotein 50; PDBTitle: structure of the second pdz domain of nherf-1
94	c3ougA	Alignment	not modelled	11.1	23	PDB header: lyase Chain: A: PDB Molecule: aspartate 1-decarboxylase; PDBTitle: crystal structure of cleaved l-aspartate-alpha-decarboxylase from2 francisella tularensis
95	d1zoka1	Alignment	not modelled	11.1	35	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
96	d1dgsa2	Alignment	not modelled	10.8	16	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: DNA ligase/mRNA capping enzyme postcatalytic domain
97	c1pt1B	Alignment	not modelled	10.7	6	PDB header: lyase Chain: B: PDB Molecule: aspartate 1-decarboxylase; PDBTitle: unprocessed pyruvyl dependent aspartate decarboxylase with histidine2 11 mutated to alanine
98	d1ppya	Alignment	not modelled	10.6	6	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Pyruvyl dependent aspartate decarboxylase, ADC
99	d1yela1	Alignment	not modelled	10.5	13	Fold: DNA-binding pseudobarrel domain Superfamily: DNA-binding pseudobarrel domain Family: B3 DNA binding domain