

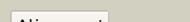
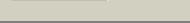
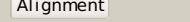
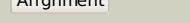
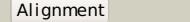
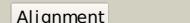
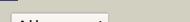
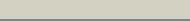
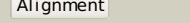
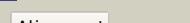
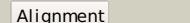
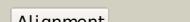
Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P28917
Date	Thu Jan 5 11:45:28 GMT 2012
Unique Job ID	33aea8b5130788fe

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1musa_			97.3	12	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Transposase inhibitor (Tn5 transposase)
2	d1b7ea_			97.1	12	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Transposase inhibitor (Tn5 transposase)
3	d2v9va2			82.6	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: C-terminal fragment of elongation factor SelB
4	c2v9vA_			69.1	10	PDB header: transcription Chain: A: PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: crystal structure of moorella thermoacetica selb(377-511)
5	c3hefB_			53.1	22	PDB header: viral protein Chain: B: PDB Molecule: gene 1 protein; PDBTitle: crystal structure of the bacteriophage sf6 terminase small2 subunit
6	d2ezha_			49.2	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
7	d2ezia_			48.0	27	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
8	c6paxA_			46.8	24	PDB header: gene regulation/dna Chain: A: PDB Molecule: homeobox protein pax-6; PDBTitle: crystal structure of the human pax-6 paired domain-dna2 complex reveals a general model for pax protein-dna3 interactions
9	c2plyB_			27.5	9	PDB header: translation/rna Chain: B: PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: structure of the mrna binding fragment of elongation factor2 selb in complex with secis rna.
10	c2vp8A_			22.2	18	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase 2; PDBTitle: structure of mycobacterium tuberculosis rv1207
11	d1ajza_			21.5	12	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase

12	d1pdnc			20.5	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Paired domain
13	d1e8qa			19.9	36	Fold: Cellulose docking domain, dockering Superfamily: Cellulose docking domain, dockering Family: Cellulose docking domain, dockering
14	c2pfsA			19.4	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: universal stress protein; PDBTitle: crystal structure of universal stress protein from nitrosomonas2 europaea
15	c2rfpA			18.0	15	PDB header: hydrolase Chain: A: PDB Molecule: putative ntp pyrophosphohydrolase; PDBTitle: crystal structure of putative ntp pyrophosphohydrolase2 (yp_001813558.1) from exiguobacterium sibiricum 255-15 at 1.74 a ³ resolution
16	d1iyxa1			16.5	22	Fold: TIM beta/alpha-barrel Superfamily: Enolase C-terminal domain-like Family: Enolase
17	c2y5sA			15.1	15	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: crystal structure of burkholderia cenocepacia dihydropteroate2 synthase complexed with 7,8-dihydropteroate.
18	d1dlwa			13.6	11	Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
19	c3e2dB			13.1	17	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: the 1.4 a crystal structure of the large and cold-active2 vibrio sp. alkaline phosphatase
20	c3rl1B			12.4	24	PDB header: oxidoreductase Chain: B: PDB Molecule: short-chain type dehydrogenase/reductase; PDBTitle: crystal structure of a short-chain type dehydrogenase/reductase from2 mycobacterium marinum
21	d2fgga1		not modelled	12.2	31	Fold: dsRBD-like Superfamily: Rv2632c-like Family: Rv2632c-like
22	c2kvCA		not modelled	12.0	23	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: solution structure of the mycobacterium tuberculosis protein rv0543c,2 a member of the duf3349 superfamily. seattle structural genomics3 center for infectious disease target mytud.17112.a
23	c3mx7A		not modelled	12.0	29	PDB header: apoptosis Chain: A: PDB Molecule: fas apoptotic inhibitory molecule 1; PDBTitle: crystal structure analysis of human faim-ntd
24	c2j4mA		not modelled	11.5	36	PDB header: protein binding Chain: A: PDB Molecule: endoglycanase 45a; PDBTitle: double dockerin from piromyces equi cel45a
25	d3bpva1		not modelled	11.3	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
26	d1uuza		not modelled	10.8	20	Fold: Inhibitor of vertebrate lysozyme, Ivy Superfamily: Inhibitor of vertebrate lysozyme, Ivy Family: Inhibitor of vertebrate lysozyme, Ivy
27	c2kzvA		not modelled	10.8	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of cv_0373(175-257) protein from2 chromobacterium violaceum, northeast structural genomics consortium3 target cvr118a
28	c3emkA		not modelled	10.8	25	PDB header: oxidoreductase Chain: A: PDB Molecule: glucose/ribitol dehydrogenase; PDBTitle: 2.5a crystal structure of glucose/ribitol dehydrogenase2

29	c3pk0B_		Alignment	not modelled	10.5	16 from brucella melitensis PDB header: oxidoreductase Chain: B: PDB Molecule: short-chain dehydrogenase/reductase sdr; PDBTitle: crystal structure of short-chain dehydrogenase/reductase sdr from2 mycobacterium smegmatis
30	c1gmuB_		Alignment	not modelled	10.2	8 PDB header: metallochaperone Chain: B: PDB Molecule: uree; PDBTitle: structure of uree
31	c2z1nA_		Alignment	not modelled	9.9	26 PDB header: oxidoreductase Chain: A: PDB Molecule: dehydrogenase; PDBTitle: crystal structure of ape0912 from aeropyrum pernix k1
32	d1xb4a2		Alignment	not modelled	9.7	7 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
33	c3ol4B_		Alignment	not modelled	9.7	22 PDB header: unknown function Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of a putative uncharacterized protein from2 mycobacterium smegmatis, an ortholog of rv0543c
34	c3rf7A_		Alignment	not modelled	9.7	11 PDB header: oxidoreductase Chain: A: PDB Molecule: iron-containing alcohol dehydrogenase; PDBTitle: crystal structure of an iron-containing alcohol dehydrogenase2 (sden_2133) from shewanella denitrificans os-217 at 2.12 a resolution
35	c3gk0H_		Alignment	not modelled	9.6	24 PDB header: transferase Chain: H: PDB Molecule: pyridoxine 5'-phosphate synthase; PDBTitle: crystal structure of pyridoxal phosphate biosynthetic2 protein from burkholderia pseudomallei
36	c1e17A_		Alignment	not modelled	9.6	9 PDB header: dna binding domain Chain: A: PDB Molecule: afx; PDBTitle: solution structure of the dna binding domain of the human forkhead transcription factor afx (foxo4)
37	d1cyda_		Alignment	not modelled	9.6	22 Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
38	d1g9ga_		Alignment	not modelled	9.4	71 Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Cellulases catalytic domain
39	c3aq8A_		Alignment	not modelled	9.1	4 PDB header: oxygen binding Chain: A: PDB Molecule: group 1 truncated hemoglobin; PDBTitle: crystal structure of truncated hemoglobin from tetrahymena pyriformis,2 q46e mutant, fe(iii) form
40	d1osna_		Alignment	not modelled	9.1	9 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nucleotide and nucleoside kinases
41	d2c6ya1		Alignment	not modelled	9.1	6 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
42	c3n1uA_		Alignment	not modelled	9.0	15 PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, had superfamily, subfamily iii a; PDBTitle: structure of putative had superfamily (subfamily iii a) hydrolase from2 legionella pneumophila
43	d2abka_		Alignment	not modelled	8.9	15 Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Endonuclease III
44	d1mpga1		Alignment	not modelled	8.8	14 Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: DNA repair glycosylase, 2 C-terminal domains
45	d1leyea_		Alignment	not modelled	8.8	19 Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
46	c3ak4C_		Alignment	not modelled	8.8	21 PDB header: oxidoreductase Chain: C: PDB Molecule: nadh-dependent quinuclidinone reductase; PDBTitle: crystal structure of nadh-dependent quinuclidinone reductase from2 agrobacterium tumefaciens
47	d3orca_		Alignment	not modelled	8.7	21 Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
48	c3co7C_		Alignment	not modelled	8.7	14 PDB header: transcription/dna Chain: C: PDB Molecule: forkhead box protein o1; PDBTitle: crystal structure of foxo1 dbd bound to dbe2 dna
49	d1w6ta1		Alignment	not modelled	8.6	23 Fold: TIM beta/alpha-barrel Superfamily: Enolase C-terminal domain-like Family: Enolase
50	d1s69a_		Alignment	not modelled	8.6	21 Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
51	c2yf3F_		Alignment	not modelled	8.5	20 PDB header: hydrolase Chain: F: PDB Molecule: mazg-like nucleoside triphosphate pyrophosphohydrolase; PDBTitle: crystal structure of dr2231, the mazg-like protein from2 deinococcus radiodurans, complex with manganese
52	d2ptza1		Alignment	not modelled	8.1	15 Fold: TIM beta/alpha-barrel Superfamily: Enolase C-terminal domain-like Family: Enolase
53	d2a22a1		Alignment	not modelled	8.0	20 Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: YfcE-like
						PDB header: hydrolase

54	c3a52A	Alignment	not modelled	7.8	18	Chain: A: PDB Molecule: cold-active alkaline phosphatase; PDBTitle: crystal structure of cold-active alkaline phosphatase from2 psychrophile shewanella sp.
55	d1m5wa	Alignment	not modelled	7.7	28	Fold: TIM beta/alpha-barrel Superfamily: Pyridoxine 5'-phosphate synthase Family: Pyridoxine 5'-phosphate synthase
56	c1l2aD	Alignment	not modelled	7.6	57	PDB header: hydrolase Chain: D: PDB Molecule: cellbiohydrolase; PDBTitle: the crystal structure and catalytic mechanism of2 cellbiohydrolase cels, the major enzymatic component of3 the clostridium thermocellum cellulosome
57	d1l1ya	Alignment	not modelled	7.6	57	Fold: alpha/alpha toroid Superfamily: Six-hairpin glycosidases Family: Cellulas catalytic domain
58	d1g31a	Alignment	not modelled	7.6	20	Fold: GroES-like Superfamily: GroES-like Family: GroES
59	c3ctmH	Alignment	not modelled	7.5	22	PDB header: oxidoreductase Chain: H: PDB Molecule: carbonyl reductase; PDBTitle: crystal structure of a carbonyl reductase from candida2 parapsilosis with anti-prelog stereo-specificity
60	c1hj0A	Alignment	not modelled	7.5	17	PDB header: actin binding peptide Chain: A: PDB Molecule: thymosin beta9; PDBTitle: thymosin beta9
61	c2iucB	Alignment	not modelled	7.3	25	PDB header: hydrolase Chain: B: PDB Molecule: alkaline phosphatase; PDBTitle: structure of alkaline phosphatase from the antarctic2 bacterium tab5
62	c1qcrD	Alignment	not modelled	7.3	8	PDB header: PDB COMPND:
63	c3othB	Alignment	not modelled	7.3	11	PDB header: transferase/antibiotic Chain: B: PDB Molecule: calg1; PDBTitle: crystal structure of calg1, calicheamicin glycosyltransferase, tdp2 and calicheamicin alpha3i bound form
64	d1xi8a3	Alignment	not modelled	7.1	21	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
65	c3g73A	Alignment	not modelled	7.0	17	PDB header: transcription/dna Chain: A: PDB Molecule: forkhead box protein m1; PDBTitle: structure of the foxm1 dna binding
66	c1eb0A	Alignment	not modelled	7.0	13	PDB header: chaperone Chain: A: PDB Molecule: urease accessory protein uree; PDBTitle: crystal structure of bacillus pasteurii uree at 1.85 a,2 phased by siras. type i crystal form.
67	c2giaB	Alignment	not modelled	7.0	63	PDB header: translation Chain: B: PDB Molecule: mitochondrial rna-binding protein 1; PDBTitle: crystal structures of trypanosoma brucei mrp1/mrp2
68	d2giab1	Alignment	not modelled	7.0	63	Fold: ssDNA-binding transcriptional regulator domain Superfamily: ssDNA-binding transcriptional regulator domain Family: Guide RNA binding protein gBP
69	d1lidra	Alignment	not modelled	6.9	7	Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
70	d1bdba	Alignment	not modelled	6.9	19	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
71	c1c94B	Alignment	not modelled	6.9	63	PDB header: gene regulation Chain: B: PDB Molecule: retro-gcn4 leucine zipper; PDBTitle: reversing the sequence of the gcn4 leucine zipper does not2 affect its fold.
72	d2o23a1	Alignment	not modelled	6.8	22	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
73	d1rh6a	Alignment	not modelled	6.7	15	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: Excisionase-like
74	d1aela	Alignment	not modelled	6.7	21	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
75	d1d1la	Alignment	not modelled	6.6	26	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
76	c2x4mD	Alignment	not modelled	6.6	27	PDB header: hydrolase Chain: D: PDB Molecule: coagulase/fibrinolysin; PDBTitle: yersinia pestis plasminogen activator pla
77	c3ctxA	Alignment	not modelled	6.5	26	PDB header: oxidoreductase Chain: A: PDB Molecule: dehydrogenase with different specificities; PDBTitle: quaternary complex structure of gluconate 5-dehydrogenase from2 streptococcus suis type 2
78	c2wdzD	Alignment	not modelled	6.4	16	PDB header: oxidoreductase Chain: D: PDB Molecule: short-chain dehydrogenase/reductase; PDBTitle: crystal structure of the short chain dehydrogenase2 galactitol-dehydrogenase (gatdh) of rhodobacter3 sphaeroides in complex with nad+ and 1,2-pentandiol
79	d2gm3a1	Alignment	not modelled	6.4	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: Universal stress protein-like
80	c2o25A	Alignment	not modelled	6.4	12	PDB header: oxidoreductase Chain: A: PDB Molecule: enoyl-acyl carrier reductase;

80	c2v6sm	Alignment	not modelled	6.4	12	PDBTitle: the structure of t. gondii enoyl acyl carrier protein reductase in2 complex with nad and triclosan PDB header: immune system Chain: A: PDB Molecule: excretory-secretory protein 2; PDBTitle: crystal structure of aencylostoma ceylanicum excretory-secretory2 protein 2
81	c3nswA	Alignment	not modelled	6.3	60	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein duf2179; PDBTitle: crystal structure of uncharacterized protein conserved in bacteria2 duf2179 from eubacterium ventriosum
82	c3hlua	Alignment	not modelled	6.2	13	PDB header: oxidoreductase Chain: F: PDB Molecule: 7-alpha-hydroxysteroid dehydrogenase; PDBTitle: 2.2a crystal structure of 7-alpha-hydroxysteroid2 dehydrogenase from brucella melitensis
83	c3gaff	Alignment	not modelled	6.2	17	PDB header: oxidoreductase Chain: Q: PDB Molecule: mitochondrial cytochrome c1, heme protein; PDBTitle: chicken cytochrome bc1 complex inhibited by an iodinated analogue of2 the polyketide crocacin-d
84	c3cwbQ	Alignment	not modelled	6.1	8	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
85	d1d5va	Alignment	not modelled	6.1	11	PDB header: signaling protein Chain: A: PDB Molecule: hypothetical protein loc64762; PDBTitle: solution structure of the sam_pnt-domain of the2 hypothetical protein loc64762
86	c2dkzA	Alignment	not modelled	6.1	12	PDB header: structural genomics Chain: A: PDB Molecule: hypothetical protein; PDBTitle: chemical shift assignments of pa4090 from pseudomonas2 aeruginosa
87	c2jpiA	Alignment	not modelled	6.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: probable nadp-dependent mannitol dehydrogenase; PDBTitle: crystal structure of the nadp-dependent mannitol dehydrogenase from2 cladosporium herbarum.
88	c3gdFA	Alignment	not modelled	6.0	22	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
89	d1tx2a	Alignment	not modelled	5.9	12	PDB header: transferase Chain: A: PDB Molecule: dhps, dihydropteroate synthase; PDBTitle: dihydropteroate synthetase, with bound inhibitor manic, from bacillus2 anthracis
90	c1tx2A	Alignment	not modelled	5.9	12	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
91	d4croa	Alignment	not modelled	5.9	26	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
92	d1d7oa	Alignment	not modelled	5.8	17	PDB header: metal binding protein Chain: D: PDB Molecule: hydrogenase nickel incorporation protein hya; PDBTitle: crystal structure of hya in the dimeric form
93	c3a44D	Alignment	not modelled	5.8	0	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
94	d1fmca	Alignment	not modelled	5.8	29	Fold: Inhibitor of vertebrate lysozyme, Ivy Superfamily: Inhibitor of vertebrate lysozyme, Ivy Family: Inhibitor of vertebrate lysozyme, Ivy
95	d1gpqa	Alignment	not modelled	5.7	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Forkhead DNA-binding domain
96	d2hfha	Alignment	not modelled	5.7	8	PDB header: oxidoreductase Chain: B: PDB Molecule: short chain dehydrogenase or reductase; PDBTitle: crystal structure of a putative short chain dehydrogenase or reductase2 from mycobacterium abscessus
97	c3rihB	Alignment	not modelled	5.7	19	PDB header: transferase Chain: A: PDB Molecule: riboflavin synthase; PDBTitle: crystal structure of an archaeal pentameric riboflavin2 synthase complex with a substrate analog inhibitor
98	c2b99A	Alignment	not modelled	5.7	18	PDB header: oxidoreductase Chain: C: PDB Molecule: short chain oxidoreductase; PDBTitle: crystal structure of a metagenomic short-chain oxidoreductase (sdr) in2 complex with nadp
99	c3rkrC	Alignment	not modelled	5.6	20	