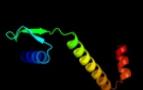
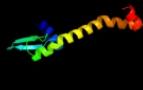
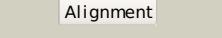
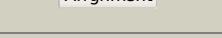


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	Q57154
Date	Thu Jan 5 12:37:14 GMT 2012
Unique Job ID	aa5e856751bb910e

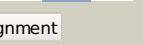
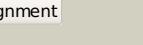
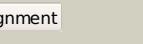
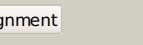
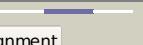
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2z9oB_			99.4	15	PDB header: replication/dna Chain: B; PDB Molecule: replication initiation protein; PDBTitle: crystal structure of the dimeric form of repe in complex with the repe2 operator dna
2	c2nraC_			99.2	14	PDB header: replication/dna Chain: C; PDB Molecule: pi protein; PDBTitle: crystal structure of pi initiator protein in complex with iteron dna
3	d1repC2			97.3	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Replication initiation protein
4	d1hkqa_			97.1	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Replication initiation protein
5	d2nrac2			96.9	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Replication initiation protein
6	d2nrac1			96.3	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Replication initiation protein
7	d1repC1			94.6	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Replication initiation protein
8	c2v79B_			93.5	15	PDB header: dna-binding protein Chain: B; PDB Molecule: dna replication protein dnad; PDBTitle: crystal structure of the n-terminal domain of dnad from2 bacillus subtilis
9	d2v7fa1			91.4	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Rps19E-like
10	d1stza1			85.5	29	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Heat-inducible transcription repressor HrcA, N-terminal domain
11	c2xznT_			84.1	13	PDB header: ribosome Chain: T; PDB Molecule: rps19e; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2

12	c3ic7A_			83.9	25	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative transcriptional regulator; PDBTitle: crystal structure of putative transcriptional regulator of gntR family2 from bacteroides thetaiotaomicron
13	c3iz6S_			83.0	21	PDB header: ribosome Chain: S: PDB Molecule: 40s ribosomal protein s19 (s19e); PDBTitle: localization of the small subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
14	d1dpua_			81.6	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: C-terminal domain of RPA32
15	c1dpua_			81.6	20	PDB header: dna binding protein Chain: A: PDB Molecule: replication protein a (rpa32) c-terminal domain; PDBTitle: solution structure of the c-terminal domain of human rpa322 complexed with ung2(73-88)
16	c3neuA_			73.6	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lin1836 protein; PDBTitle: the crystal structure of a functionally-unknown protein lin1836 from2 listeria innocua clip11262
17	c2du9A_			73.4	23	PDB header: transcription Chain: A: PDB Molecule: predicted transcriptional regulators; PDBTitle: crystal structure of the transcription factor from c. glutamicum
18	c3jyvT_			70.7	23	PDB header: ribosome Chain: T: PDB Molecule: s19e protein; PDBTitle: structure of the 40s rrna and proteins and p/e tRNA for eukaryotic2 ribosome based on cryo-em map of thermomyces lanuginosus ribosome at 8.9a resolution
19	c3by6C_			69.9	17	PDB header: transcription regulator Chain: C: PDB Molecule: predicted transcriptional regulator; PDBTitle: crystal structure of a transcriptional regulator from oenococcus oeni
20	c3f8mA_			64.8	42	PDB header: transcription Chain: A: PDB Molecule: gntr-family protein transcriptional regulator; PDBTitle: crystal structure of phnf from mycobacterium smegmatis
21	c2vn2B_		not modelled	64.6	15	PDB header: replication Chain: B: PDB Molecule: chromosome replication initiation protein; PDBTitle: crystal structure of the n-terminal domain of dnad protein2 from geobacillus kaustophilus hta426
22	c1stzB_		not modelled	63.1	27	PDB header: transcription Chain: B: PDB Molecule: heat-inducible transcription repressor hrca homolog; PDBTitle: crystal structure of a hypothetical protein at 2.2 a resolution
23	c3bwgA_		not modelled	60.0	27	PDB header: transcription regulator Chain: A: PDB Molecule: uncharacterized hth-type transcriptional regulator yydk; PDBTitle: the crystal structure of possible transcriptional regulator yydk from2 bacillus subtilis subsp. subtilis str. 168
24	d1p4xa1		not modelled	56.1	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
25	c3hrmA_		not modelled	54.7	12	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
26	d1okra_		not modelled	53.3	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Penicillinase repressor
27	c3edpB_		not modelled	49.8	25	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: lin2111 protein; PDBTitle: the crystal structure of the protein lin2111 (functionally unknown)2 from listeria innocua clip11262
						Fold: DNA/RNA-binding 3-helical bundle

28	d1jhfa1	Alignment	not modelled	48.7	19	Superfamily: "Winged helix" DNA-binding domain Family: LexA repressor, N-terminal DNA-binding domain
29	c3ltiA	Alignment	not modelled	48.4	35	PDB header: transferase Chain: A: PDB Molecule: dna-directed rna polymerase subunit beta; PDBTitle: crystal structure of the escherichia coli rna polymerase beta subunit2 beta2-beta4 domains
30	d2g9wa1	Alignment	not modelled	48.4	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Penicillinase repressor
31	d1sata2	Alignment	not modelled	42.3	14	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Serralysin-like metalloprotease, catalytic (N-terminal) domain
32	c3kp3B	Alignment	not modelled	41.1	10	PDB header: transcription regulator/antibiotic Chain: B: PDB Molecule: transcriptional regulator tcar; PDBTitle: staphylococcus epidermidis in complex with ampicillin
33	c3eetA	Alignment	not modelled	38.5	18	PDB header: transcription regulator Chain: A: PDB Molecule: putative gntr-family transcriptional regulator; PDBTitle: crystal structure of putative gntr-family transcriptional2 regulator
34	c2y75F	Alignment	not modelled	38.5	23	PDB header: transcription Chain: F: PDB Molecule: hth-type transcriptional regulator cymr; PDBTitle: the structure of cymr (yrzc) the global cysteine regulator2 of <i>b. subtilis</i>
35	c2i5gB	Alignment	not modelled	38.1	18	PDB header: hydrolase Chain: B: PDB Molecule: amidohydrolase; PDBTitle: crystal struture of amidohydrolase from pseudomonas2 aeruginosa
36	d1hw1a1	Alignment	not modelled	38.1	35	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: GnTR-like transcriptional regulators
37	c2jtvA	Alignment	not modelled	37.9	20	PDB header: structural genomics Chain: A: PDB Molecule: protein of unknown function; PDBTitle: solution structure of protein rpa3401, northeast structural genomics2 consortium target rpt7, ontario center for structural proteomics3 target rp3384
38	c3boqB	Alignment	not modelled	37.8	18	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: crystal structure of marr family transcriptional regulator from2 silicibacter pomeroyi
39	c3eqxB	Alignment	not modelled	36.3	27	PDB header: dna binding protein Chain: B: PDB Molecule: fic domain containing transcriptional regulator; PDBTitle: crystal structure of a fic family protein (so_4266) from shewanella2 oneidensis at 1.6 a resolution
40	c2k6xA	Alignment	not modelled	36.2	18	PDB header: transcription Chain: A: PDB Molecule: rna polymerase sigma factor rpd; PDBTitle: autoregulation of a group 1 bacterial sigma factor involves2 the formation of a region 1.1- induced compacted structure
41	d3bz6a1	Alignment	not modelled	35.8	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PSPTO2686-like
42	c3kf1	Alignment	not modelled	35.5	29	PDB header: ligase/rna Chain: J: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit;c; PDBTitle: crystal structure of the transamidosome
43	d1o57a1	Alignment	not modelled	34.3	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: N-terminal domain of <i>Bacillus PurR</i>
44	c3edhA	Alignment	not modelled	34.2	15	PDB header: hydrolase Chain: A: PDB Molecule: bone morphogenetic protein 1; PDBTitle: crystal structure of bone morphogenetic protein 1 protease2 domain in complex with partially bound dms0
45	d1k7ia2	Alignment	not modelled	34.1	11	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Serralysin-like metalloprotease, catalytic (N-terminal) domain
46	c1e2xA	Alignment	not modelled	33.0	33	PDB header: transcriptional regulation Chain: A: PDB Molecule: fatty acid metabolism regulator protein; PDBTitle: fadr, fatty acid responsive transcription factor from e.2 coli
47	d2fbha1	Alignment	not modelled	32.5	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
48	c2k4bA	Alignment	not modelled	32.4	20	PDB header: dna binding protein Chain: A: PDB Molecule: transcriptional regulator; PDBTitle: copr repressor structure
49	d1m7va	Alignment	not modelled	31.9	18	Fold: Nitric oxide (NO) synthase oxygenase domain Superfamily: Nitric oxide (NO) synthase oxygenase domain Family: Nitric oxide (NO) synthase oxygenase domain
50	c3ff5B	Alignment	not modelled	30.3	23	PDB header: protein transport Chain: B: PDB Molecule: peroxisomal biogenesis factor 14; PDBTitle: crystal structure of the conserved n-terminal domain of the2 peroxisomal matrix-protein-import receptor, pex14p
51	c3k2gA	Alignment	not modelled	30.1	26	PDB header: resiniferatoxin binding protein Chain: A: PDB Molecule: resiniferatoxin-binding, phosphotriesterase- PDBTitle: crystal structure of a resiniferatoxin-binding protein from2 rhodobacter sphaeroides
52	c2w85A	Alignment	not modelled	29.8	23	PDB header: protein transport Chain: A: PDB Molecule: peroxisomal membrane anchor protein pex14; PDBTitle: structure of pex14 in compex with pex19
						Fold: DNA/RNA-binding 3-helical bundle

53	d2d1ha1	Alignment	not modelled	29.2	25	Superfamily: "Winged helix" DNA-binding domain Family: TrmB-like
54	d1m9ma_	Alignment	not modelled	29.1	23	Fold: Nitric oxide (NO) synthase oxygenase domain Superfamily: Nitric oxide (NO) synthase oxygenase domain Family: Nitric oxide (NO) synthase oxygenase domain
55	d1q2oa_	Alignment	not modelled	28.8	23	Fold: Nitric oxide (NO) synthase oxygenase domain Superfamily: Nitric oxide (NO) synthase oxygenase domain Family: Nitric oxide (NO) synthase oxygenase domain
56	c3r0aB_	Alignment	not modelled	26.6	20	PDB header: transcription regulator Chain: B; PDB Molecule: putative transcriptional regulator; PDBTitle: possible transcriptional regulator from methanoscincus mazaei go1 (gi2 21227196)
57	c3ihuA_	Alignment	not modelled	26.4	33	PDB header: transcription regulator Chain: A; PDB Molecule: transcriptional regulator, gntr family; PDBTitle: crystal structure of dna binding protein (yp_298823.1) from ralstonia2 eutropha jmp134 at 1.92 a resolution
58	d2hs5a1	Alignment	not modelled	25.7	31	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: GnTR-like transcriptional regulators
59	c3lu2B_	Alignment	not modelled	25.6	23	PDB header: hydrolase Chain: B; PDB Molecule: lmo2462 protein; PDBTitle: structure of lmo2462, a listeria monocytogenes amidohydrolase family2 putative dipeptidase
60	d1ku9a_	Alignment	not modelled	25.6	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: DNA-binding protein Mj223
61	d2dk5a1	Alignment	not modelled	24.6	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: RPO3F domain-like
62	c3bz6A_	Alignment	not modelled	24.6	22	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: upf0502 protein pspto_2686; PDBTitle: crystal structure of a conserved protein of unknown function from2 pseudomonas syringae pv. tomato str. dc3000
63	d1p6ra_	Alignment	not modelled	24.6	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Penicillinase repressor
64	c2krxA_	Alignment	not modelled	24.3	26	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: asl3597 protein; PDBTitle: solution nmr structure of asl3597 from nostoc sp. pcc7120. northeast2 structural genomics consortium target id nsr244.
65	c3b40A_	Alignment	not modelled	24.2	30	PDB header: hydrolase Chain: A; PDB Molecule: probable dipeptidase; PDBTitle: crystal structure of the probable dipeptidase pvdm from2 pseudomonas aeruginosa
66	c3itcA_	Alignment	not modelled	24.0	30	PDB header: hydrolase Chain: A; PDB Molecule: renal dipeptidase; PDBTitle: crystal structure of sco3058 with bound citrate and glycerol
67	d1mzba_	Alignment	not modelled	23.8	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: FUR-like
68	c3fdgA_	Alignment	not modelled	23.5	17	PDB header: hydrolase Chain: A; PDB Molecule: dipeptidase ac. metallo peptidase. merops family m19; PDBTitle: the crystal structure of the dipeptidase ac, metallo peptidase. merops2 family m19
69	d1a9xa1	Alignment	not modelled	23.2	22	Fold: Carbamoyl phosphate synthetase, large subunit connection domain Superfamily: Carbamoyl phosphate synthetase, large subunit connection domain Family: Carbamoyl phosphate synthetase, large subunit connection domain
70	d1v4ra1	Alignment	not modelled	22.8	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: GnR-like transcriptional regulators
71	c2ragB_	Alignment	not modelled	22.8	22	PDB header: hydrolase Chain: B; PDB Molecule: dipeptidase; PDBTitle: crystal structure of aminohydrolase from caulobacter crescentus
72	d1mjta_	Alignment	not modelled	22.5	21	Fold: Nitric oxide (NO) synthase oxygenase domain Superfamily: Nitric oxide (NO) synthase oxygenase domain Family: Nitric oxide (NO) synthase oxygenase domain
73	c3rhgA_	Alignment	not modelled	22.5	21	PDB header: hydrolase Chain: A; PDB Molecule: putative phosphotriesterase; PDBTitle: crystal structure of amidohydrolase pmi1525 (target efi-500319) from2 proteus mirabilis hi4320
74	c2wv0H_	Alignment	not modelled	22.1	29	PDB header: transcription Chain: H; PDB Molecule: hth-type transcriptional repressor yvoa; PDBTitle: crystal structure of the gntr-hutc family member yvoa from2 bacillus subtilis
75	c1iojA_	Alignment	not modelled	21.4	38	PDB header: apolipoprotein Chain: A; PDB Molecule: apoc-i; PDBTitle: human apolipoprotein c-i, nmr, 18 structures
76	c1om8A_	Alignment	not modelled	21.1	13	PDB header: hydrolase Chain: A; PDB Molecule: serralysin; PDBTitle: crystal structure of a cold adapted alkaline protease from pseudomonas2 tac ii 18, co-crystallized with 10 mm edta
77	d1j6ra_	Alignment	not modelled	20.8	7	Fold: Methionine synthase activation domain-like Superfamily: Methionine synthase activation domain-like Family: Hypothetical protein TM0269
78	d1kapp2	Alignment	not modelled	20.8	6	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Serralysin-like metalloprotease, catalytic (N-terminal) domain

79	d2oz6a1		Alignment	not modelled	20.8	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: CAP C-terminal domain-like
80	c3o2pE		Alignment	not modelled	20.6	29	PDB header: ligase, cell cycle Chain: E: PDB Molecule: cell division control protein 53; PDBTitle: a dual e3 mechanism for rub1 ligation to cdc53: dcn1(p)-cdc53(whb)
81	c3bj6B		Alignment	not modelled	20.3	19	PDB header: transcription regulator Chain: B: PDB Molecule: transcriptional regulator, marr family; PDBTitle: crystal structure of marr family transcription regulator sp03579
82	d2frha1		Alignment	not modelled	20.1	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
83	d1ub9a		Alignment	not modelled	20.1	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
84	d1iuya		Alignment	not modelled	20.1	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: SCF ubiquitin ligase complex WHB domain
85	d1mkma1		Alignment	not modelled	20.0	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Transcriptional regulator IcIR, N-terminal domain
86	d1hova		Alignment	not modelled	19.7	10	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
87	d3bwga1		Alignment	not modelled	18.8	28	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: GntR-like transcriptional regulators
88	c3nqoB		Alignment	not modelled	18.7	20	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
89	c1j5yA		Alignment	not modelled	18.5	28	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator, biotin repressor family; PDBTitle: crystal structure of transcriptional regulator (tm1602) from2 thermotoga maritima at 2.3 a resolution
90	d1lj9a		Alignment	not modelled	18.3	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators
91	c3c7jA		Alignment	not modelled	18.1	22	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, gntR family; PDBTitle: crystal structure of transcriptional regulator (gntR family member)2 from pseudomonas syringae pv. tomato str. dc3000
92	d1i76a		Alignment	not modelled	17.6	16	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
93	d3e7ga1		Alignment	not modelled	17.5	19	Fold: Nitric oxide (NO) synthase oxygenase domain Superfamily: Nitric oxide (NO) synthase oxygenase domain Family: Nitric oxide (NO) synthase oxygenase domain
94	c1fooA		Alignment	not modelled	17.4	23	PDB header: oxidoreductase Chain: A: PDB Molecule: nitric-oxide synthase; PDBTitle: bovine endothelial nitric oxide synthase heme domain complexed with l-2 arg and no(h4b-free)
95	d1itua		Alignment	not modelled	17.3	12	Fold: TIM beta/alpha-barrel Superfamily: Metallo-dependent hydrolases Family: Renal dipeptidase
96	d3e7ma1		Alignment	not modelled	17.2	23	Fold: Nitric oxide (NO) synthase oxygenase domain Superfamily: Nitric oxide (NO) synthase oxygenase domain Family: Nitric oxide (NO) synthase oxygenase domain
97	d2ev0a1		Alignment	not modelled	17.1	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Iron-dependent repressor protein
98	d1uxja1		Alignment	not modelled	16.4	15	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
99	c2l4aa		Alignment	not modelled	16.4	31	PDB header: dna binding protein Chain: A: PDB Molecule: leucine responsive regulatory protein; PDBTitle: nmr structure of the dna-binding domain of e.coli Irp