




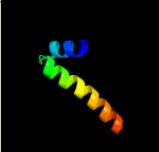

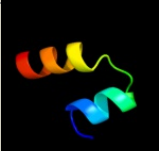

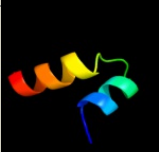



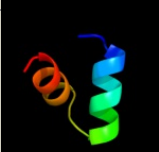

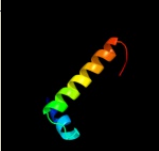

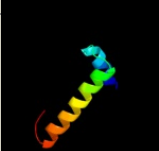

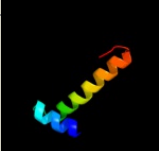


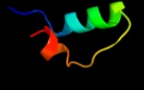



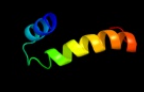
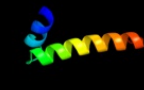





Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P09996
Date	Thu Jan 5 11:02:37 GMT 2012
Unique Job ID	d80d58f98a062338

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1z67a1	 Alignment		100.0	97	Fold: YidB-like Superfamily: YidB-like Family: YidB-like
2	d1b8za_	 Alignment		68.4	21	Fold: IHF-like DNA-binding proteins Superfamily: IHF-like DNA-binding proteins Family: Prokaryotic DNA-bending protein
3	d1huua_	 Alignment		66.2	18	Fold: IHF-like DNA-binding proteins Superfamily: IHF-like DNA-binding proteins Family: Prokaryotic DNA-bending protein
4	c2lfcA_	 Alignment		62.9	4	PDB header: oxidoreductase Chain: A: PDB Molecule: fumarate reductase, flavoprotein subunit; PDBTitle: solution nmr structure of fumarate reductase flavoprotein subunit from2 lactobacillus plantarum, northeast structural genomics consortium3 target lpr145j
5	d1y0pa3	 Alignment		62.4	21	Fold: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Superfamily: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Family: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain
6	d1d4ca3	 Alignment		57.5	8	Fold: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Superfamily: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Family: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain
7	c1tr8A_	 Alignment		57.3	15	PDB header: chaperone Chain: A: PDB Molecule: conserved protein (mth177); PDBTitle: crystal structure of archaeal nascent polypeptide-associated complex2 (aenac)
8	d1mula_	 Alignment		53.3	21	Fold: IHF-like DNA-binding proteins Superfamily: IHF-like DNA-binding proteins Family: Prokaryotic DNA-bending protein
9	d1p71a_	 Alignment		51.6	28	Fold: IHF-like DNA-binding proteins Superfamily: IHF-like DNA-binding proteins Family: Prokaryotic DNA-bending protein
10	c3c4iA_	 Alignment		49.5	26	PDB header: dna binding protein Chain: A: PDB Molecule: dna-binding protein hu homolog; PDBTitle: crystal structure analysis of n terminal region containing the2 dimerization domain and dna binding domain of hu protein(histone like3 protein-dna binding) from mycobacterium tuberculosis [h37rv]
11	d1qo8a3	 Alignment		47.6	13	Fold: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Superfamily: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Family: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain

12	d1tafb_	Alignment		47.3	25	Fold: Histone-fold Superfamily: Histone-fold Family: TBP-associated factors, TAFs
13	d1owfa_	Alignment		43.0	26	Fold: IHF-like DNA-binding proteins Superfamily: IHF-like DNA-binding proteins Family: Prokaryotic DNA-bending protein
14	d1l0oc_	Alignment		41.6	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
15	c1l0oC_	Alignment		41.6	17	PDB header: protein binding Chain: C: PDB Molecule: sigma factor; PDBTitle: crystal structure of the bacillus stearotherophilus anti-2 sigma factor spoiiab with the sporulation sigma factor3 sigmaf
16	d1exea_	Alignment		40.2	21	Fold: IHF-like DNA-binding proteins Superfamily: IHF-like DNA-binding proteins Family: Prokaryotic DNA-bending protein
17	d2o97b1	Alignment		40.1	11	Fold: IHF-like DNA-binding proteins Superfamily: IHF-like DNA-binding proteins Family: Prokaryotic DNA-bending protein
18	c3ebnD_	Alignment		37.5	20	PDB header: hydrolase Chain: D: PDB Molecule: replicase polyprotein 1ab; PDBTitle: a special dimerization of sars-cov main protease c-terminal2 domain due to domain-swapping
19	d1luxca_	Alignment		34.8	25	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
20	d2p7vb1	Alignment		34.6	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
21	d2hsga1	Alignment	not modelled	33.6	20	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
22	d2phcb1	Alignment	not modelled	33.1	13	Fold: Cyclophilin-like Superfamily: Cyclophilin-like Family: PH0987 C-terminal domain-like
23	d1qpza1	Alignment	not modelled	32.1	25	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
24	d1lcda_	Alignment	not modelled	32.1	25	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
25	c2iifA_	Alignment	not modelled	31.8	26	PDB header: recombination/dna Chain: A: PDB Molecule: integration host factor; PDBTitle: single chain integration host factor mutant protein (scihf2-2 k45ae) in complex with dna
26	d2duca1	Alignment	not modelled	30.3	20	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral cysteine protease of trypsin fold
27	c2zp2B_	Alignment	not modelled	30.2	4	PDB header: transferase inhibitor Chain: B: PDB Molecule: kinase a inhibitor; PDBTitle: c-terminal domain of kipi from bacillus subtilis
28	c2w7nA_	Alignment	not modelled	30.0	18	PDB header: transcription/dna Chain: A: PDB Molecule: trfb transcriptional repressor protein; PDBTitle: crystal structure of kora bound to operator dna: insight2 into repressor cooperation in rp4 gene regulation
29	c2lcvA_	Alignment	not modelled	28.4	35	PDB header: transcription regulator Chain: A: PDB Molecule: hth-type transcriptional repressor cytr;

29	c2lcva_	Alignment	not modelled	26.4	35	PDBTitle: structure of the cytidine repressor dna-binding domain; an alternate2 calculation
30	d2cg4a1	Alignment	not modelled	26.8	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
31	d1luxda_	Alignment	not modelled	25.8	25	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
32	d2bjca1	Alignment	not modelled	25.8	25	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
33	c2l8nA_	Alignment	not modelled	23.9	35	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional repressor cytr; PDBTitle: nmr structure of the cytidine repressor dna binding domain in presence2 of operator half-site dna
34	d1lga1	Alignment	not modelled	23.7	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
35	c3h5tA_	Alignment	not modelled	23.4	25	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, lacI family; PDBTitle: crystal structure of a transcriptional regulator, lacI2 family protein from corynebacterium glutamicum
36	c1bdhA_	Alignment	not modelled	22.5	25	PDB header: transcription/dna Chain: A: PDB Molecule: protein (purine repressor); PDBTitle: purine repressor mutant-hypoxanthine-palindromic operator2 complex
37	d1z6ra1	Alignment	not modelled	21.9	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: ROK associated domain
38	d1ku7a_	Alignment	not modelled	21.4	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
39	d1lefaa1	Alignment	not modelled	21.1	25	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
40	d2cyya1	Alignment	not modelled	21.1	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
41	d2fug21	Alignment	not modelled	21.1	4	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: NQO2-like
42	d1ku3a_	Alignment	not modelled	19.7	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
43	c3kxD_	Alignment	not modelled	19.1	30	PDB header: transcription regulator Chain: D: PDB Molecule: transcriptional regulator, lacI family; PDBTitle: crystal structure of a transcriptional regulator, lacI2 family protein from silicibacter pomeroyi
44	d1wh5a_	Alignment	not modelled	19.0	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
45	c1or7A_	Alignment	not modelled	19.0	13	PDB header: transcription Chain: A: PDB Molecule: rna polymerase sigma-e factor; PDBTitle: crystal structure of escherichia coli sigmae with the cytoplasmic2 domain of its anti-sigma rsea
46	c2phcB_	Alignment	not modelled	18.5	13	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein ph0987; PDBTitle: crystal structure of conserved uncharacterized protein ph0987 from2 pyrococcus horikoshii
47	d1tw3a1	Alignment	not modelled	17.7	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Plant O-methyltransferase, N-terminal domain
48	c1zvvA_	Alignment	not modelled	17.7	19	PDB header: transcription/dna Chain: A: PDB Molecule: glucose-resistance amylase regulator; PDBTitle: crystal structure of a ccpa-crh-dna complex
49	d1tya_	Alignment	not modelled	17.4	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
50	d1qzza1	Alignment	not modelled	17.3	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Plant O-methyltransferase, N-terminal domain
51	d3procl	Alignment	not modelled	17.2	13	Fold: Alpha-lytic protease prodomain-like Superfamily: Alpha-lytic protease prodomain Family: Alpha-lytic protease prodomain
52	d1x2na1	Alignment	not modelled	16.8	0	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
53	d2gqba1	Alignment	not modelled	16.7	20	Fold: RPA2825-like Superfamily: RPA2825-like Family: RPA2825-like
54	d3e11a1	Alignment	not modelled	16.7	11	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: TTHA0227-like
55	d1wi9a_	Alignment	not modelled	16.5	26	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PCI domain (PINT motif)
56	d2cfxa1	Alignment	not modelled	16.4	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain

						Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
57	c2da4A_	Alignment	not modelled	15.6	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein dkfzp686k21156; PDBTitle: solution structure of the homeobox domain of the2 hypothetical protein, dkfzp686k21156
58	d1e3oc1	Alignment	not modelled	15.5	6	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
59	c3d23A_	Alignment	not modelled	15.4	15	PDB header: hydrolase Chain: A: PDB Molecule: 3c-like proteinase; PDBTitle: main protease of hcov-hku1
60	d1x2ma1	Alignment	not modelled	15.0	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
61	d1or7a1	Alignment	not modelled	15.0	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
62	c2kz3A_	Alignment	not modelled	14.5	19	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein rad5113; PDBTitle: backbone 1h, 13c, and 15n chemical shift assignments for human rad51d2 from 1 to 83
63	c2cg4B_	Alignment	not modelled	14.3	17	PDB header: transcription Chain: B: PDB Molecule: regulatory protein asnc; PDBTitle: structure of e.coli asnc
64	c3majA_	Alignment	not modelled	14.3	15	PDB header: dna binding protein Chain: A: PDB Molecule: dna processing chain a; PDBTitle: crystal structure of putative dna processing protein dpra from2 rhodopseudomonas palustris cga009
65	c2q6fB_	Alignment	not modelled	14.2	19	PDB header: hydrolase Chain: B: PDB Molecule: infectious bronchitis virus (ibv) main protease; PDBTitle: crystal structure of infectious bronchitis virus (ibv) main2 protease in complex with a michael acceptor inhibitor n3
66	c1rr7A_	Alignment	not modelled	14.1	18	PDB header: transcription Chain: A: PDB Molecule: middle operon regulator; PDBTitle: crystal structure of the middle operon regulator protein of2 bacteriophage mu
67	d1rr7a_	Alignment	not modelled	14.1	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Middle operon regulator, Mor
68	d1alna1	Alignment	not modelled	14.0	29	Fold: Cytidine deaminase-like Superfamily: Cytidine deaminase-like Family: Cytidine deaminase
69	c1y66D_	Alignment	not modelled	13.8	17	PDB header: de novo protein Chain: D: PDB Molecule: engrailed homeodomain; PDBTitle: dioxane contributes to the altered conformation and2 oligomerization state of a designed engrailed homeodomain3 variant
70	c2l4aA_	Alignment	not modelled	13.8	10	PDB header: dna binding protein Chain: A: PDB Molecule: leucine responsive regulatory protein; PDBTitle: nmr structure of the dna-binding domain of e.coli lrp
71	d1e0ga_	Alignment	not modelled	13.6	15	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
72	d1bw5a_	Alignment	not modelled	13.5	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
73	d2cqxa1	Alignment	not modelled	13.4	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
74	c2yskA_	Alignment	not modelled	13.4	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ttha1432; PDBTitle: crystal structure of a hypothetical protein ttha1432 from thermus2 thermophilus
75	c2np2B_	Alignment	not modelled	13.3	10	PDB header: dna binding protein/dna Chain: B: PDB Molecule: hbb; PDBTitle: hbb-dna complex
76	c2qufB_	Alignment	not modelled	13.2	16	PDB header: transcription Chain: B: PDB Molecule: transcription factor pf0095; PDBTitle: crystal structure of transcription factor axxa-pf0095 from pyrococcus2 furiosus
77	d1p9sa_	Alignment	not modelled	13.2	27	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral cysteine protease of trypsin fold
78	c3mmlD_	Alignment	not modelled	13.0	4	PDB header: hydrolase Chain: D: PDB Molecule: allophanate hydrolase subunit 1; PDBTitle: allophanate hydrolase complex from mycobacterium smegmatis, msmeg0435-2 msmeg0436
79	d2ozua1	Alignment	not modelled	12.8	15	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
80	c1alna_	Alignment	not modelled	12.7	25	PDB header: hydrolase Chain: A: PDB Molecule: cytidine deaminase; PDBTitle: crystal structure of cytidine deaminase complexed with 3-deazacytidine
81	c2l0ka_	Alignment	not modelled	12.5	37	PDB header: transcription Chain: A: PDB Molecule: stage iii sporulation protein d; PDBTitle: nmr solution structure of a transcription factor spoiiiid in complex2 with dna
82	c2e1cA_	Alignment	not modelled	12.5	14	PDB header: transcription/dna Chain: A: PDB Molecule: putative hth-type transcriptional regulator ph1519; PDBTitle: structure of putative hth-type transcriptional regulator

					ph1519/dna2 complex
83	c3t72o_	Alignment	not modelled	12.5	19 PDB header: transcription/dna Chain: O: PDB Molecule: pho box dna (strand 1); PDBTitle: phob(e)-sigma70(4)-(rnap-beta-flap-tip-helix)-dna transcription2 activation sub-complex
84	c2da5A_	Alignment	not modelled	12.4	6 PDB header: dna binding protein Chain: A: PDB Molecule: zinc fingers and homeoboxes protein 3; PDBTitle: solution structure of the second homeobox domain of zinc2 fingers and homeoboxes protein 3 (triple homeobox 13 protein)
85	d1mh3a1	Alignment	not modelled	12.4	11 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
86	c2djpA_	Alignment	not modelled	12.3	20 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein sb145; PDBTitle: the solution structure of the lysm domain of human2 hypothetical protein sb145
87	d1s7ea1	Alignment	not modelled	12.2	26 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
88	d2r5yb1	Alignment	not modelled	12.2	28 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
89	c4proD_	Alignment	not modelled	12.0	12 PDB header: serine protease Chain: D: PDB Molecule: alpha-lytic protease; PDBTitle: alpha-lytic protease complexed with pro region
90	c2da7A_	Alignment	not modelled	11.9	6 PDB header: dna binding protein Chain: A: PDB Molecule: zinc finger homeobox protein 1b; PDBTitle: solution structure of the homeobox domain of zinc finger2 homeobox protein 1b (smad interacting protein 1)
91	c3nauA_	Alignment	not modelled	11.8	22 PDB header: transcription Chain: A: PDB Molecule: zinc fingers and homeoboxes protein 2; PDBTitle: crystal structure of zhx2 hd2 (zinc-fingers and homeoboxes protein 2,2 homeodomain 2)
92	c3f6wE_	Alignment	not modelled	11.7	24 PDB header: dna binding protein Chain: E: PDB Molecule: xre-family like protein; PDBTitle: xre-family like protein from pseudomonas syringae pv. tomato str.2 dc3000
93	d1k61a_	Alignment	not modelled	11.6	11 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
94	c2a6eF_	Alignment	not modelled	11.6	20 PDB header: transferase Chain: F: PDB Molecule: rna polymerase sigma factor rpod; PDBTitle: crystal structure of the t. thermophilus rna polymerase2 holoenzyme
95	d2ecba1	Alignment	not modelled	11.5	5 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
96	d2hddb_	Alignment	not modelled	11.5	20 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
97	d1du6a_	Alignment	not modelled	11.5	28 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
98	d1j5ya1	Alignment	not modelled	11.5	17 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Biotin repressor-like
99	c2k5eA_	Alignment	not modelled	11.4	7 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of putative uncharacterized protein2 gsu1278 from methanocaldococcus jannaschii, northeast3 structural genomics consortium (nesg) target gsr195