



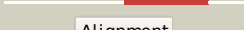

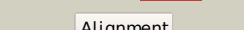

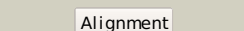





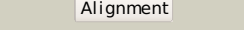

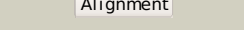
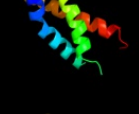
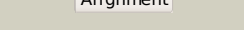

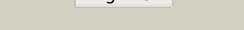












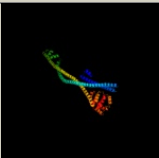
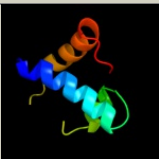
Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P00579
Date	Thu Jan 5 10:56:46 GMT 2012
Unique Job ID	6a3a384d74f72d6f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3iydF_	 Alignment		100.0	96	PDB header: transcription/dna Chain: F: PDB Molecule: rna polymerase sigma factor rpod; PDBTitle: three-dimensional em structure of an intact activator-dependent2 transcription initiation complex
2	c2a6eF_	 Alignment		100.0	59	PDB header: transferase Chain: F: PDB Molecule: rna polymerase sigma factor rpod; PDBTitle: crystal structure of the t. thermophilus rna polymerase2 holoenzyme
3	c1l9uH_	 Alignment		100.0	56	PDB header: transcription Chain: H: PDB Molecule: sigma factor siga; PDBTitle: thermus aquaticus rna polymerase holoenzyme at 4 a2 resolution
4	c1ku2A_	 Alignment		100.0	60	PDB header: transcription Chain: A: PDB Molecule: sigma factor siga; PDBTitle: crystal structure of thermus aquaticus rna polymerase sigma2 subunit fragment containing regions 1.2 to 3.1
5	d1siga_	 Alignment		100.0	86	Fold: Sigma2 domain of RNA polymerase sigma factors Superfamily: Sigma2 domain of RNA polymerase sigma factors Family: Sigma2 domain of RNA polymerase sigma factors
6	c1rp3G_	 Alignment		100.0	25	PDB header: transcription Chain: G: PDB Molecule: rna polymerase sigma factor sigma-28 (flia); PDBTitle: cocrystal structure of the flagellar sigma/anti-sigma2 complex, sigma-28/flgm
7	d1ku2a2	 Alignment		100.0	60	Fold: Sigma2 domain of RNA polymerase sigma factors Superfamily: Sigma2 domain of RNA polymerase sigma factors Family: Sigma2 domain of RNA polymerase sigma factors
8	d1smyf3	 Alignment		100.0	60	Fold: Sigma2 domain of RNA polymerase sigma factors Superfamily: Sigma2 domain of RNA polymerase sigma factors Family: Sigma2 domain of RNA polymerase sigma factors
9	d1rp3a3	 Alignment		99.8	28	Fold: Sigma2 domain of RNA polymerase sigma factors Superfamily: Sigma2 domain of RNA polymerase sigma factors Family: Sigma2 domain of RNA polymerase sigma factors
10	c3t72o_	 Alignment		99.7	95	PDB header: transcription/dna Chain: O: PDB Molecule: pho box dna (strand 1); PDBTitle: phob(e)-sigma70(4)-(rnap-betha-flap-tip-helix)-dna transcription2 activation sub-complex
11	d1smyf2	 Alignment		99.7	56	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain

12	d1ku7a_	Alignment		99.6	56	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
13	d2p7vb1	Alignment		99.6	100	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
14	d1ttya_	Alignment		99.5	62	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
15	c1or7A_	Alignment		99.4	22	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
16	c3mzyA_	Alignment		99.4	31	PDB header: rna binding protein Chain: A: PDB Molecule: rna polymerase sigma-h factor; PDBTitle: the crystal structure of the rna polymerase sigma-h factor from2 fusobacterium nucleatum to 2.5a
17	d1ku3a_	Alignment		99.4	56	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
18	c2q1zA_	Alignment		99.3	20	PDB header: transcription Chain: A: PDB Molecule: rpoe, ecf sigi; PDBTitle: crystal structure of rhodobacter sphaeroides sigi in complex with the2 anti-sigma chrr
19	d1ku2a1	Alignment		99.2	59	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma3 domain
20	d1l0oc_	Alignment		98.9	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
21	c1l0oC_	Alignment	not modelled	98.9	18	PDB header: protein binding Chain: C: PDB Molecule: sigma factor; PDBTitle: crystal structure of the bacillus stearothermophilus anti-2 sigma factor spoiiab with the sporulation sigma factor3 sigmaf
22	d1rp3a2	Alignment	not modelled	98.9	28	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
23	c3hugA_	Alignment	not modelled	98.8	19	PDB header: transcription/membrane protein Chain: A: PDB Molecule: rna polymerase sigma factor; PDBTitle: crystal structure of mycobacterium tuberculosis anti-sigma factor rsla2 in complex with -35 promoter binding domain of sigl
24	d1rp3a1	Alignment	not modelled	98.7	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma3 domain
25	d1or7a1	Alignment	not modelled	98.3	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
26	c2o8xA_	Alignment	not modelled	98.2	15	PDB header: transcription Chain: A: PDB Molecule: probable rna polymerase sigma-c factor; PDBTitle: crystal structure of the "-35 element" promoter recognition domain of2 mycobacterium tuberculosis sigc
27	d1xsva_	Alignment	not modelled	98.2	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: YlxM/p13-like
28	d1s7oa_	Alignment	not modelled	98.1	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors

					Family: YlxM/p13-like PDB header: contractile protein Chain: A: PDB Molecule: tropomyosin; PDBTitle: crystal structure of tropomyosin at 7 angstroms resolution2 in the spermine-induced crystal form
29	c1c1gA_	Alignment	not modelled	98.0	8
30	c1ciiA_	Alignment		97.9	12
31	d1or7b2	Alignment	not modelled	97.8	23
32	d1or7a2	Alignment	not modelled	97.8	21
33	d1yioa1	Alignment	not modelled	97.7	14
34	c3ojaB_	Alignment	not modelled	97.4	13
35	c1x3uA_	Alignment	not modelled	97.2	18
36	c2k6xA_	Alignment		97.1	28
37	c1yvlB_	Alignment	not modelled	97.0	7
38	c1zljE_	Alignment	not modelled	97.0	18
39	c3qp5C_	Alignment	not modelled	97.0	24
40	d1a04a1	Alignment	not modelled	97.0	21
41	c2o7gA_	Alignment	not modelled	96.9	17
42	c2rnjA_	Alignment	not modelled	96.9	22
43	d1fsea_	Alignment	not modelled	96.8	29
44	c2krfB_	Alignment	not modelled	96.8	22
45	c2q0oA_	Alignment	not modelled	96.8	19
46	d1l3la1	Alignment	not modelled	96.7	27
47	c3sztB_	Alignment	not modelled	96.7	26
48	c1h0mD_	Alignment	not modelled	96.7	26
49	d1p4wa_	Alignment	not modelled	96.5	22
50	c3cloC_	Alignment	not modelled	96.5	21
51	c2w48D_	Alignment	not modelled	96.0	15
					PDB header: transcription

52	c3cwgA	Alignment	not modelled	95.9	8	Chain: A: PDB Molecule: signal transducer and activator of transcription PDBTitle: unphosphorylated mouse stat3 core fragment
53	c3n0rA	Alignment	not modelled	95.5	19	PDB header: signaling protein Chain: A: PDB Molecule: response regulator; PDBTitle: structure of the phyr stress response regulator at 1.25 angstrom2 resolution
54	d1h3la	Alignment	not modelled	95.5	16	Fold: Sigma2 domain of RNA polymerase sigma factors Superfamily: Sigma2 domain of RNA polymerase sigma factors Family: Sigma2 domain of RNA polymerase sigma factors
55	c3klnC	Alignment	not modelled	95.4	17	PDB header: transcription Chain: C: PDB Molecule: transcriptional regulator, luxr family; PDBTitle: vibrio cholerae vpst
56	c3c3wB	Alignment	not modelled	95.4	20	PDB header: transcription Chain: B: PDB Molecule: two component transcriptional regulatory protein devr; PDBTitle: crystal structure of the mycobacterium tuberculosis hypoxic response2 regulator dosr
57	c1bg1A	Alignment	not modelled	95.4	8	PDB header: transcription/dna Chain: A: PDB Molecule: protein (transcription factor stat3b); PDBTitle: transcription factor stat3b/dna complex
58	c2jpcA	Alignment	not modelled	95.3	22	PDB header: dna binding protein Chain: A: PDB Molecule: ssrb; PDBTitle: ssrb dna binding protein
59	c1ei3C	Alignment	not modelled	94.9	4	PDB header: PDB COMPND:
60	c1bf5A	Alignment	not modelled	94.6	7	PDB header: gene regulation/dna Chain: A: PDB Molecule: signal transducer and activator of transcription PDBTitle: tyrosine phosphorylated stat-1/dna complex
61	c2efrB	Alignment	not modelled	94.5	12	PDB header: contractile protein Chain: B: PDB Molecule: general control protein gcn4 and tropomyosin 1 alpha chain; PDBTitle: crystal structure of the c-terminal tropomyosin fragment with n- and2 c-terminal extensions of the leucine zipper at 1.8 angstroms3 resolution
62	c1hciB	Alignment	not modelled	94.3	9	PDB header: triple-helix coiled coil Chain: B: PDB Molecule: alpha-actinin 2; PDBTitle: crystal structure of the rod domain of alpha-actinin
63	c1degF	Alignment	not modelled	94.3	9	PDB header: PDB COMPND:
64	c1zn2A	Alignment	not modelled	94.1	13	PDB header: transcription regulator Chain: A: PDB Molecule: response regulatory protein; PDBTitle: low resolution structure of response regulator styr
65	c1rnlA	Alignment	not modelled	93.7	22	PDB header: signal transduction protein Chain: A: PDB Molecule: nitrate/nitrite response regulator protein narl; PDBTitle: the nitrate/nitrite response regulator protein narl from narl
66	c3na7A	Alignment	not modelled	93.6	9	PDB header: gene regulation, chaperone Chain: A: PDB Molecule: hp0958; PDBTitle: 2.2 angstrom structure of the hp0958 protein from helicobacter pylori2 ccug 17874
67	c2oevA	Alignment	not modelled	93.3	8	PDB header: protein transport Chain: A: PDB Molecule: programmed cell death 6-interacting protein; PDBTitle: crystal structure of alix/aip1
68	d1jhfa1	Alignment	not modelled	92.9	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: LexA repressor, N-terminal DNA-binding domain
69	c1u78A	Alignment	not modelled	92.9	22	PDB header: dna binding protein/dna Chain: A: PDB Molecule: transposable element tc3 transposase; PDBTitle: structure of the bipartite dna-binding domain of tc32 transposase bound to transposon dna
70	c2d3eD	Alignment	not modelled	92.7	15	PDB header: contractile protein Chain: D: PDB Molecule: general control protein gcn4 and tropomyosin 1 PDBTitle: crystal structure of the c-terminal fragment of rabbit2 skeletal alpha-tropomyosin
71	c1jchC	Alignment	not modelled	92.3	11	PDB header: ribosome inhibitor, hydrolase Chain: C: PDB Molecule: colicin e3; PDBTitle: crystal structure of colicin e3 in complex with its immunity protein
72	d2o38a1	Alignment	not modelled	92.0	11	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: NE1354
73	c2o38A	Alignment	not modelled	92.0	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: putative xre family transcriptional regulator
74	c2v71A	Alignment	not modelled	91.3	10	PDB header: nuclear protein Chain: A: PDB Molecule: nuclear distribution protein nude-like 1; PDBTitle: coiled-coil region of nudel
75	c3f2hA	Alignment	not modelled	91.2	24	PDB header: lyase Chain: A: PDB Molecule: alkylmercury lyase; PDBTitle: crystal structure of the mercury-bound form of merb mutant2 c160s, the organomercurial lyase involved in a bacterial3 mercury resistance system
76	c3mkyP	Alignment	not modelled	89.9	16	PDB header: dna binding protein/dna Chain: P: PDB Molecule: protein sobp; PDBTitle: structure of sobp(155-323)-18mer dna complex, i23 form
						Fold: lambda repressor-like DNA-binding domains

77	d2a6ca1	Alignment	not modelled	89.9	15	Superfamily: lambda repressor-like DNA-binding domains Family: NE1354
78	d1trra_	Alignment	not modelled	89.8	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Trp repressor, TrpR
79	c1degO_	Alignment	not modelled	89.7	10	PDB header: PDB COMPND:
80	c3r0aB_	Alignment	not modelled	89.2	11	PDB header: transcription regulator Chain: B: PDB Molecule: putative transcriptional regulator; PDBTitle: possible transcriptional regulator from methanosarcina mazei go1 (gi2 21227196)
81	c3ghgK_	Alignment	not modelled	88.8	4	PDB header: blood clotting Chain: K: PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of human fibrinogen
82	d2d1ha1	Alignment	not modelled	88.8	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: TrmB-like
83	c2x4hA_	Alignment	not modelled	88.7	15	PDB header: transcription Chain: A: PDB Molecule: hypothetical protein sso2273; PDBTitle: crystal structure of the hypothetical protein sso2273 from2 sulfolobus solfataricus
84	c3ojaA_	Alignment	not modelled	88.3	13	PDB header: protein binding Chain: A: PDB Molecule: leucine-rich immune molecule 1; PDBTitle: crystal structure of Irim1/apl1c complex
85	c1ei3E_	Alignment	not modelled	88.0	5	PDB header: PDB COMPND:
86	c1degD_	Alignment	not modelled	87.8	5	PDB header: PDB COMPND:
87	c3hnwB_	Alignment	not modelled	87.5	8	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a basic coiled-coil protein of unknown function2 from eubacterium eligens atcc 27750
88	c3fmyA_	Alignment	not modelled	87.4	13	PDB header: dna binding protein Chain: A: PDB Molecule: hth-type transcriptional regulator mqsa PDBTitle: structure of the c-terminal domain of the e. coli protein2 mqsa (ygib3021)
89	d1vz0a1	Alignment	not modelled	87.0	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: KorB DNA-binding domain-like Family: KorB DNA-binding domain-like
90	c2w7nA_	Alignment	not modelled	87.0	9	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
91	c2bnoA_	Alignment	not modelled	86.9	12	PDB header: oxidoreductase Chain: A: PDB Molecule: epoxidase; PDBTitle: the structure of hydroxypropylphosphonic acid epoxidase2 from s. wedmorensis.
92	c3mlfC_	Alignment	not modelled	86.7	26	PDB header: transcription regulator Chain: C: PDB Molecule: transcriptional regulator; PDBTitle: putative transcriptional regulator from staphylococcus aureus.
93	d1rioa_	Alignment	not modelled	86.6	8	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
94	c3k2zA_	Alignment	not modelled	85.7	19	PDB header: hydrolase Chain: A: PDB Molecule: lexa repressor; PDBTitle: crystal structure of a lexa protein from thermotoga maritima
95	c1y9qA_	Alignment	not modelled	85.5	18	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator, hth_3 family; PDBTitle: crystal structure of hth_3 family transcriptional regulator2 from vibrio cholerae
96	c3dtpA_	Alignment	not modelled	85.3	11	PDB header: contractile protein Chain: A: PDB Molecule: myosin 2 heavy chain chimera of smooth and PDBTitle: tarantula heavy meromyosin obtained by flexible docking to2 tarantula muscle thick filament cryo-em 3d-map
97	d2cfxa1	Alignment	not modelled	85.0	7	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
98	c2p6tH_	Alignment	not modelled	85.0	16	PDB header: transcription Chain: H: PDB Molecule: transcriptional regulator, lrp/asnc family; PDBTitle: crystal structure of transcriptional regulator nmb0573 and l-leucine2 complex from neisseria meningitidis
99	c3kxaD_	Alignment	not modelled	83.9	20	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of ngo0477 from neisseria gonorrhoeae
100	d2cg4a1	Alignment	not modelled	83.7	28	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
101	d1biaa1	Alignment	not modelled	83.6	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Biotin repressor-like
102	c2l4aA_	Alignment	not modelled	83.4	11	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
103	d1nr3a_	Alignment	not modelled	83.4	19	Fold: DNA-binding protein Tfx Superfamily: DNA-binding protein Tfx

					Family: DNA-binding protein Tfx
104	d2b5aa1	Alignment	not modelled	83.3	18 Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: SinR domain-like
105	d1i1ga1	Alignment	not modelled	83.1	14 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Lrp/AsnC-like transcriptional regulator N-terminal domain
106	c2it0A_	Alignment	not modelled	83.1	13 PDB header: transcription/dna Chain: A: PDB Molecule: iron-dependent repressor ider; PDBTitle: crystal structure of a two-domain ider-dna complex crystal2 form ii
107	c3nqoB_	Alignment	not modelled	83.0	13 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
108	c2jv1A_	Alignment	not modelled	82.8	25 PDB header: transcription Chain: A: PDB Molecule: trmbf1; PDBTitle: nmr structure of the c-terminal domain of mbf1 of trichoderma reesei
109	c3trbA_	Alignment	not modelled	82.8	14 PDB header: dna binding protein Chain: A: PDB Molecule: virulence-associated protein i; PDBTitle: structure of an addiction module antidote protein of a higa (higa)2 family from coxiella burnetii
110	d1r71a_	Alignment	not modelled	82.7	21 Fold: DNA/RNA-binding 3-helical bundle Superfamily: KorB DNA-binding domain-like Family: KorB DNA-binding domain-like
111	d1y7ya1	Alignment	not modelled	82.6	12 Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: SinR domain-like
112	c2ef8A_	Alignment	not modelled	82.6	15 PDB header: transcription regulator Chain: A: PDB Molecule: putative transcription factor; PDBTitle: crystal structure of c.ecot38is
113	d1lmb3_	Alignment	not modelled	82.4	9 Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
114	c2vbzA_	Alignment	not modelled	82.0	14 PDB header: dna-binding protein Chain: A: PDB Molecule: transcriptional regulatory protein; PDBTitle: feast or famine regulatory protein (rv3291c)from m.2 tuberculosis complexed with l-tryptophan
115	d1jhga_	Alignment	not modelled	81.7	20 Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Trp repressor, TrpR
116	c3f6wE_	Alignment	not modelled	81.6	15 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
117	c1r71B_	Alignment	not modelled	81.6	21 PDB header: transcription/dna Chain: B: PDB Molecule: transcriptional repressor protein korb; PDBTitle: crystal structure of the dna binding domain of korb in2 complex with the operator dna
118	c2gl2B_	Alignment	not modelled	81.5	11 PDB header: cell adhesion Chain: B: PDB Molecule: adhesion a; PDBTitle: crystal structure of the tetra mutant (t66g,r67g,f68g,2 y69g) of bacterial adhesin fada
119	c2ppxA_	Alignment	not modelled	81.3	19 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein atu1735; PDBTitle: crystal structure of a hth xre-family like protein from agrobacterium2 tumefaciens
120	d2ppxa1	Alignment	not modelled	81.3	19 Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: SinR domain-like