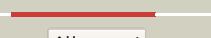
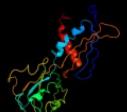
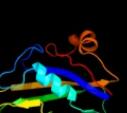
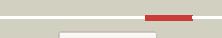
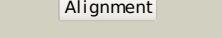
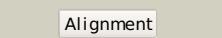
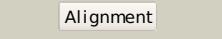


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0A7Z4
Date	Thu Jan 5 11:06:30 GMT 2012
Unique Job ID	595f62cbbe4922c2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1bdfC_			100.0	99	PDB header: nucleotidyltransferase Chain: C: PDB Molecule: rna polymerase alpha subunit; PDBTitle: structure of escherichia coli rna polymerase alpha subunit2 n-terminal domain
2	c3iydB_			100.0	100	PDB header: transcription/dna Chain: B: PDB Molecule: dna-directed rna polymerase subunit alpha; PDBTitle: three-dimensional em structure of an intact activator-dependent transcription initiation complex
3	c1smyB_			100.0	46	PDB header: transferase Chain: B: PDB Molecule: dna-directed rna polymerase alpha chain; PDBTitle: structural basis for transcription regulation by alarmone2 ppGpp
4	c1i6hC_			100.0	18	PDB header: transcription/dna-rna hybrid Chain: C: PDB Molecule: dna-directed rna polymerase ii 45kd polypeptide; PDBTitle: rna polymerase ii elongation complex
5	c3howC_			100.0	18	PDB header: transcription,transferase/dna/rna hybrid Chain: C: PDB Molecule: dna-directed rna polymerase ii subunit rpb3; PDBTitle: complete rna polymerase ii elongation complex iii with a t-u2 mismatch and a frayed rna 3'-uridine
6	c2pmzS_			100.0	20	PDB header: translation, transferase Chain: S: PDB Molecule: dna-directed rna polymerase subunit d; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus
7	c3h0gO_			100.0	24	PDB header: transcription Chain: O: PDB Molecule: dna-directed rna polymerase ii subunit rpb3; PDBTitle: rna polymerase ii from schizosaccharomyces pombe
8	d1bdfa2			100.0	100	Fold: Insert subdomain of RNA polymerase alpha subunit Superfamily: Insert subdomain of RNA polymerase alpha subunit Family: Insert subdomain of RNA polymerase alpha subunit
9	d1smya2			100.0	45	Fold: Insert subdomain of RNA polymerase alpha subunit Superfamily: Insert subdomain of RNA polymerase alpha subunit Family: Insert subdomain of RNA polymerase alpha subunit
10	d1ynja2			100.0	46	Fold: Insert subdomain of RNA polymerase alpha subunit Superfamily: Insert subdomain of RNA polymerase alpha subunit Family: Insert subdomain of RNA polymerase alpha subunit
11	d1bdfa1			100.0	99	Fold: DCoH-like Superfamily: RBP11-like subunits of RNA polymerase Family: RNA polymerase alpha subunit dimerisation domain

12	d1ynja1			100.0	52	Fold: DCoH-like Superfamily: RBP11-like subunits of RNA polymerase Family: RNA polymerase alpha subunit dimerisation domain
13	d1cooa_			99.9	100	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
14	d1smya1			99.9	56	Fold: DCoH-like Superfamily: RBP11-like subunits of RNA polymerase Family: RNA polymerase alpha subunit dimerisation domain
15	d1lb2b_			99.9	100	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
16	d1z3eb1			99.8	41	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
17	d1doqa_			99.8	33	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
18	d1twfc2			99.7	18	Fold: Insert subdomain of RNA polymerase alpha subunit Superfamily: Insert subdomain of RNA polymerase alpha subunit Family: Insert subdomain of RNA polymerase alpha subunit
19	d1twfc1			99.3	17	Fold: DCoH-like Superfamily: RBP11-like subunits of RNA polymerase Family: RNA polymerase alpha subunit dimerisation domain
20	d1szpa1			97.2	14	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
21	c1b22A_		not modelled	96.9	14	PDB header: dna binding protein Chain: A: PDB Molecule: dna repair protein rad51; PDBTitle: rad51 (n-terminal domain)
22	d1b22a_		not modelled	96.9	14	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
23	d1xpqa_		not modelled	95.8	13	Fold: DCoH-like Superfamily: RBP11-like subunits of RNA polymerase Family: RBP11/RpoL
24	c2pmzl_		not modelled	95.7	23	PDB header: translation, transferase Chain: L: PDB Molecule: dna-directed rna polymerase subunit l; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus
25	d1twfk_		not modelled	95.4	28	Fold: DCoH-like Superfamily: RBP11-like subunits of RNA polymerase Family: RBP11/RpoL
26	d1szpb1		not modelled	95.4	12	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
27	d1pzna1		not modelled	94.9	10	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
28	d2i1qa1		not modelled	94.3	12	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
29	c3h0gK_		not modelled	94.3	24	PDB header: transcription Chain: K: PDB Molecule: dna-directed rna polymerase ii subunit rpb11;

						PDBTitle: rna polymerase ii from schizosaccharomyces pombe
30	c3ldaA	Alignment	not modelled	93.5	15	PDB header: dna binding protein Chain: A: PDB Molecule: dna repair protein rad51; PDBTitle: yeast rad51 h352y filament interface mutant
31	d1dgsa1	Alignment	not modelled	93.2	18	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: NAD+-dependent DNA ligase, domain 3
32	c1t4gA	Alignment	not modelled	92.9	15	PDB header: recombination Chain: A: PDB Molecule: dna repair and recombination protein rada; PDBTitle: atpase in complex with amp-pnp
33	c2dfIA	Alignment	not modelled	92.5	13	PDB header: recombination Chain: A: PDB Molecule: dna repair and recombination protein rada; PDBTitle: crystal structure of left-handed rada filament
34	c2woA	Alignment	not modelled	91.6	20	PDB header: ligase/dna Chain: A: PDB Molecule: dna ligase; PDBTitle: last stop on the road to repair: structure of e.coli dna ligase bound2 to nicked dna-adenylate
35	c1dgsB	Alignment	not modelled	88.7	18	PDB header: ligase Chain: B: PDB Molecule: dna ligase; PDBTitle: crystal structure of nad+-dependent dna ligase from t.2 filiformis
36	c1szpC	Alignment	not modelled	86.5	12	PDB header: dna binding protein Chain: C: PDB Molecule: dna repair protein rad51; PDBTitle: a crystal structure of the rad51 filament
37	d2q0zx1	Alignment	not modelled	86.3	8	Fold: Sec63 N-terminal domain-like Superfamily: Sec63 N-terminal domain-like Family: Sec63 N-terminal domain
38	d2bgwa1	Alignment	not modelled	85.2	20	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
39	c1v9pB	Alignment	not modelled	85.2	23	PDB header: ligase Chain: B: PDB Molecule: dna ligase; PDBTitle: crystal structure of nad+-dependent dna ligase
40	d2a1jb1	Alignment	not modelled	85.2	23	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
41	c1t3nB	Alignment	not modelled	85.1	24	PDB header: replication/dna Chain: B: PDB Molecule: polymerase (dna directed) iota; PDBTitle: structure of the catalytic core of dna polymerase iota in2 complex with dna and dttp
42	c1kftA	Alignment	not modelled	81.8	21	PDB header: dna binding protein Chain: A: PDB Molecule: excinuclease abc subunit c; PDBTitle: solution structure of the c-terminal domain of uvrC from e-2 coli
43	d1kfta	Alignment	not modelled	81.8	21	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Excinuclease UvrC C-terminal domain
44	d1klsa2	Alignment	not modelled	80.6	19	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
45	d1zeta2	Alignment	not modelled	78.3	25	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
46	c1klqA	Alignment	not modelled	76.3	19	PDB header: transcription Chain: A: PDB Molecule: dbh protein; PDBTitle: crystal structure of a dinb family error prone dna2 polymerase from sulfolobus solfataricus
47	c3gqcB	Alignment	not modelled	75.7	22	PDB header: transferase/dna Chain: B: PDB Molecule: dna repair protein rev1; PDBTitle: structure of human rev1-dna-dntp ternary complex
48	c2va8A	Alignment	not modelled	75.6	21	PDB header: hydrolase Chain: A: PDB Molecule: ski2-type helicase; PDBTitle: dna repair helicase hel308
49	d1jx4a2	Alignment	not modelled	75.2	17	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
50	c2bhnd	Alignment	not modelled	74.6	25	PDB header: hydrolase Chain: D: PDB Molecule: xpf endonuclease; PDBTitle: xpf from aeropyrum pernix
51	d1x2ia1	Alignment	not modelled	74.2	21	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
52	c2kp7A	Alignment	not modelled	74.2	15	PDB header: hydrolase Chain: A: PDB Molecule: crossover junction endonuclease mus81; PDBTitle: solution nmr structure of the mus81 n-terminal hhh.2 northeast structural genomics consortium target mmt1a
53	d1u9la	Alignment	not modelled	72.5	17	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: NusA extra C-terminal domains
54	c3im2A	Alignment	not modelled	71.6	13	PDB header: hydrolase Chain: A: PDB Molecule: pre-mrna-splicing helicase brr2; PDBTitle: structure of the c-terminal sec63 unit of yeast brr2, p41212 form
55	d1cuka2	Alignment	not modelled	67.9	25	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: DNA helicase RuvA subunit, middle domain
56	c2flIA	Alignment	not modelled	65.9	24	PDB header: replication/dna Chain: A: PDB Molecule: dna polymerase iota; PDBTitle: ternary complex of human dna polymerase iota with dna

					and dntp
57	clixrA_	Alignment	not modelled	64.9	16 PDB header: hydrolase Chain: A: PDB Molecule: holliday junction dna helicase ruva; PDBTitle: ruva-ruvb complex
58	d1gm5a2	Alignment	not modelled	63.8	19 Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: RecG "wedge" domain
59	c1s97D_	Alignment	not modelled	63.0	20 PDB header: transferase/dna Chain: D: PDB Molecule: dna polymerase iv; PDBTitle: dpo4 with gt mismatch
60	d1ixra1	Alignment	not modelled	61.8	16 Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: DNA helicase RuvA subunit, middle domain
61	c2w9mB_	Alignment	not modelled	60.5	20 PDB header: dna replication Chain: B: PDB Molecule: polymerase x; PDBTitle: structure of family x dna polymerase from deinococcus2 radiodurans
62	c1d8IA_	Alignment	not modelled	56.6	25 PDB header: gene regulation Chain: A: PDB Molecule: protein (holliday junction dna helicase ruva); PDBTitle: e. coli holliday junction binding protein ruva nh2 region2 lacking domain iii
63	c1wcnA_	Alignment	not modelled	53.3	16 PDB header: rna-binding protein Chain: A: PDB Molecule: transcription elongation protein nusa; PDBTitle: nmr structure of the carboxyterminal domains of escherichia2 coli nusa
64	d1kkha2	Alignment	not modelled	51.4	25 Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Mevalonate kinase
65	d1feua_	Alignment	not modelled	49.3	21 Fold: Ribosomal protein L25-like Superfamily: Ribosomal protein L25-like Family: Ribosomal protein L25-like
66	d2edua1	Alignment	not modelled	49.1	16 Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: ComEA-like
67	c2kz3A_	Alignment	not modelled	49.1	28 PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein rad51l3; PDBTitle: backbone 1h, 13c, and 15n chemical shift assignments for human rad51d2 from 1 to 83
68	d1t94a2	Alignment	not modelled	47.1	19 Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
69	c2rrdA_	Alignment	not modelled	43.7	16 PDB header: dna binding protein Chain: A: PDB Molecule: hrdc domain from bloom syndrome protein; PDBTitle: structure of hrdc domain from human bloom syndrome protein, blm
70	d1k47a2	Alignment	not modelled	42.8	14 Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Phosphomevalonate kinase (PMK)
71	d2j3wb1	Alignment	not modelled	42.7	26 Fold: Ligand-binding domain in the NO signalling and Golgi transport Superfamily: Ligand-binding domain in the NO signalling and Golgi transport Family: TRAPP components
72	c1s5lu_	Alignment	not modelled	41.7	15 PDB header: photosynthesis Chain: U: PDB Molecule: photosystem ii 12 kda extrinsic protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
73	d1im4a_	Alignment	not modelled	41.3	16 Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
74	c3bqsB_	Alignment	not modelled	40.5	14 PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of an uncharacterized protein from2 listeria monocytogenes, trigonal form
75	c1t94B_	Alignment	not modelled	40.2	19 PDB header: replication Chain: B: PDB Molecule: polymerase (dna directed) kappa; PDBTitle: crystal structure of the catalytic core of human dna2 polymerase kappa
76	d1bvs4a2	Alignment	not modelled	38.2	18 Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: DNA helicase RuvA subunit, middle domain
77	d1s4ea2	Alignment	not modelled	37.2	17 Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Galactokinase
78	d2axtu1	Alignment	not modelled	35.6	15 Fold: SAM domain-like Superfamily: PsbU/PoIX domain-like Family: PsbU-like
79	d1piea2	Alignment	not modelled	35.6	16 Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Galactokinase
80	c2q0zX_	Alignment	not modelled	35.3	8 PDB header: protein transport Chain: X: PDB Molecule: protein pro2281; PDBTitle: crystal structure of q9p172/sec63 from homo sapiens.2 northeast structural genomics target hr1979.
81	c2aq4A_	Alignment	not modelled	34.3	24 PDB header: transferase Chain: A: PDB Molecule: dna repair protein rev1; PDBTitle: ternary complex of the catalytic core of rev1 with dna and dctp.
82	c3mr2A_	Alignment	not modelled	33.9	28 PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase eta; PDBTitle: human dna polymerase eta in complex with normal dna and incoming2 nucleotide (nrm)

83	c2b0tA	Alignment	not modelled	33.7	24	PDB header: oxireductase Chain: A: PDB Molecule: nadp isocitrate dehydrogenase; PDBTitle: structure of monomeric nadp isocitrate dehydrogenase
84	d2p6ra2	Alignment	not modelled	33.4	17	Fold: Sec63 N-terminal domain-like Superfamily: Sec63 N-terminal domain-like Family: Achaeal helicase C-terminal domain
85	c1hpA	Alignment	not modelled	32.8	17	PDB header: dna recombination Chain: A: PDB Molecule: ruva; PDBTitle: holliday junction binding protein ruva from e. coli
86	d1wuua2	Alignment	not modelled	32.6	16	Fold: Ferredoxin-like Superfamily: GHMP Kinase, C-terminal domain Family: Galactokinase
87	d1itwa	Alignment	not modelled	32.5	22	Fold: Isocitrate/lsopropylmalate dehydrogenase-like Superfamily: Isocitrate/lsopropylmalate dehydrogenase-like Family: Monomeric isocitrate dehydrogenase
88	d2aq0a1	Alignment	not modelled	32.2	15	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
89	d1wc9a	Alignment	not modelled	30.9	24	Fold: Ligand-binding domain in the NO signalling and Golgi transport Superfamily: Ligand-binding domain in the NO signalling and Golgi transport Family: TRAPP components
90	c1wuua	Alignment	not modelled	30.8	16	PDB header: transferase Chain: A: PDB Molecule: galactokinase; PDBTitle: crystal structure of human galactokinase complexed with2 mgamppnp and galactose
91	d1pyya2	Alignment	not modelled	29.3	8	Fold: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Superfamily: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Family: Penicillin-binding protein 2x (pbp-2x), c-terminal domain
92	d1k25a2	Alignment	not modelled	28.9	8	Fold: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Superfamily: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Family: Penicillin-binding protein 2x (pbp-2x), c-terminal domain
93	d1wuda1	Alignment	not modelled	28.9	11	Fold: SAM domain-like Superfamily: HRDC-like Family: HRDC domain from helicases
94	d1jmsa1	Alignment	not modelled	28.7	19	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
95	c2hfuB	Alignment	not modelled	27.8	17	PDB header: transferase Chain: B: PDB Molecule: mevalonate kinase, putative; PDBTitle: crystal structure of l. major mevalonate kinase in complex2 with r-mevalonate
96	c2h5xA	Alignment	not modelled	25.1	16	PDB header: dna binding protein Chain: A: PDB Molecule: holliday junction atp-dependent dna helicase ruva; PDBTitle: ruva from mycobacterium tuberculosis
97	c2a2cA	Alignment	not modelled	24.8	14	PDB header: transferase Chain: A: PDB Molecule: n-acetylgalactosamine kinase; PDBTitle: x-ray structure of human n-acetyl galactosamine kinase2 complexed with mg-adp and n-acetyl galactosamine 1-3 phosphate
98	d1rp5a2	Alignment	not modelled	24.4	8	Fold: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Superfamily: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Family: Penicillin-binding protein 2x (pbp-2x), c-terminal domain
99	d2zjrs1	Alignment	not modelled	23.8	20	Fold: Ribosomal protein L25-like Superfamily: Ribosomal protein L25-like Family: Ribosomal protein L25-like
100	d1s7za	Alignment	not modelled	23.7	25	Fold: Another 3-helical bundle Superfamily: B-form DNA mimic Ocr Family: B-form DNA mimic Ocr
101	c1k47F	Alignment	not modelled	22.7	12	PDB header: transferase Chain: F: PDB Molecule: phosphomevalonate kinase; PDBTitle: crystal structure of the streptococcus pneumoniae2 phosphomevalonate kinase (pmk)
102	c3c1zA	Alignment	not modelled	22.7	18	PDB header: dna binding protein Chain: A: PDB Molecule: dna integrity scanning protein disa; PDBTitle: structure of the ligand-free form of a bacterial dna damage2 sensor protein
103	d2duya1	Alignment	not modelled	22.3	23	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: ComEA-like
104	d2bcqa1	Alignment	not modelled	21.8	25	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
105	d1coka	Alignment	not modelled	20.3	20	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain