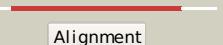
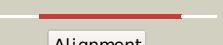
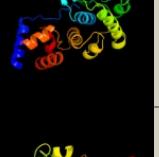
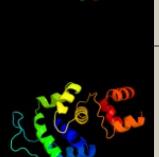
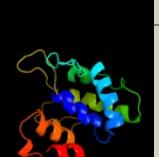
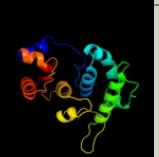
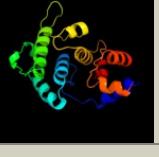


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P04395
Date	Thu Jan 5 10:58:16 GMT 2012
Unique Job ID	420c3f054521f2a0

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1mpgB			100.0	100	PDB header: hydrolase Chain: B; PDB Molecule: 3-methyladenine dna glycosylase ii; PDBTitle: 3-methyladenine dna glycosylase ii from escherichia coli
2	c2jhnb			100.0	23	PDB header: hydrolase Chain: B; PDB Molecule: 3-methyladenine dna-glycosylase; PDBTitle: 3-methyladenine dna-glycosylase from archaeoglobus fulgidus
3	d1mpga1			100.0	100	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: DNA repair glycosylase, 2 C-terminal domains
4	c3f10A			100.0	21	PDB header: hydrolase, lyase Chain: A; PDB Molecule: 8-oxoguanine-dna-glycosylase; PDBTitle: crystal structure of clostridium acetobutylicum 8-2 oxoguanine dna glycosylase in complex with 8-oxoguanosine
5	c1yqmA			100.0	22	PDB header: hydrolase/dna Chain: A; PDB Molecule: n-glycosylase/dna lyase; PDBTitle: catalytically inactive human 8-oxoguanine glycosylase2 crosslinked to 7-deazaguanine containing dna
6	c2yg8B			100.0	27	PDB header: hydrolase Chain: B; PDB Molecule: dna-3-methyladenine glycosidase ii, putative; PDBTitle: structure of an unusual 3-methyladenine dna glycosylase ii (2 alka) from deinococcus radiodurans
7	c1ko9A			100.0	21	PDB header: hydrolase Chain: A; PDB Molecule: 8-oxoguanine dna glycosylase; PDBTitle: native structure of the human 8-oxoguanine dna glycosylase2 hogg1
8	c3s6iA			100.0	23	PDB header: hydrolase/dna Chain: A; PDB Molecule: dna-3-methyladenine glycosylase 1; PDBTitle: schizosaccharomyces pombe 3-methyladenine dna glycosylase (mag1) in2 complex with abasic-dna.
9	c2h56C			100.0	22	PDB header: hydrolase Chain: C; PDB Molecule: dna-3-methyladenine glycosidase; PDBTitle: crystal structure of dna-3-methyladenine glycosidase (10174367) from2 bacillus halodurans at 2.55 a resolution
10	d2noha1			100.0	23	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: DNA repair glycosylase, 2 C-terminal domains
11	c3fhgA			100.0	19	PDB header: dna repair, hydrolase, lyase Chain: A; PDB Molecule: γ-glycosylase/dna lyase; PDBTitle: crystal structure of sulfolobus solfataricus 8-oxoguanine dna2 glycosylase (ssogg)

12	c3kntC_	Alignment		100.0	18	PDB header: hydrolase, lyase/dna Chain: C: PDB Molecule: n-glycosylase/dna lyase; PDBTitle: crystal structure of methanocaldococcus jannaschii 8-2 oxoguanine glycosylase/lyase in complex with 15mer dna containing 8-oxoguanine
13	d1orna_	Alignment		100.0	19	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Endonuclease III
14	d1pu6a_	Alignment		99.9	18	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: 3-Methyladenine DNA glycosylase III (MagIII)
15	d2abka_	Alignment		99.9	22	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Endonuclease III
16	d1mpga2	Alignment		99.9	100	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: DNA repair glycosylase, N-terminal domain
17	c3n0ub_	Alignment		99.9	22	PDB header: hydrolase, lyase Chain: B: PDB Molecule: probable n-glycosylase/dna lyase; PDBTitle: crystal structure of tm1821, the 8-oxoguanine dna glycosylase of2 thermotoga maritima
18	d1ngna_	Alignment		99.9	21	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Mismatch glycosylase
19	d1keaa_	Alignment		99.9	19	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Mismatch glycosylase
20	d1rrqa1	Alignment		99.9	17	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Mismatch glycosylase
21	d1kg2a_	Alignment	not modelled	99.9	20	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Mismatch glycosylase
22	c3n5nX_	Alignment	not modelled	99.8	23	PDB header: hydrolase Chain: X: PDB Molecule: a/g-specific adenine dna glycosylase; PDBTitle: crystal structure analysis of the catalytic domain and interdomain2 connector of human muty homologue
23	c1rrqA_	Alignment	not modelled	99.8	17	PDB header: hydrolase/dna Chain: A: PDB Molecule: muty; PDBTitle: muty adenine glycosylase in complex with dna containing an an2 a:oxog pair
24	d2noha2	Alignment	not modelled	96.9	15	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: DNA repair glycosylase, N-terminal domain
25	c2bcuA_	Alignment	not modelled	94.4	18	PDB header: transferase, lyase/dna Chain: A: PDB Molecule: dna polymerase lambda; PDBTitle: dna polymerase lambda in complex with a dna duplex2 containing an unpaired damp and a tt mismatch
26	d1vdda_	Alignment	not modelled	94.3	23	Fold: Recombination protein RecR Superfamily: Recombination protein RecR Family: Recombination protein RecR
27	c1vddC_	Alignment	not modelled	94.1	23	PDB header: recombination Chain: C: PDB Molecule: recombination protein recr; PDBTitle: crystal structure of recombinational repair protein recr
28	c2ihmA_	Alignment	not modelled	94.0	20	PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase mu; PDBTitle: polymerase mu in ternary complex with gapped 11mer dna2 duplex and bound incoming nucleotide
29	c2h5xA_	Alignment	not modelled	93.4	28	PDB header: dna binding protein Chain: A: PDB Molecule: holliday junction atp-dependent dna helicase ruva;

30	c1d8IA		Alignment	not modelled	93.3	31
31	c2csdB		Alignment	not modelled	93.3	20
32	c1ixrA		Alignment	not modelled	93.0	51
33	c8icza		Alignment	not modelled	93.0	21
34	d1ixra1		Alignment	not modelled	92.5	51
35	d1bvsA2		Alignment	not modelled	92.2	37
36	c1kdhA		Alignment	not modelled	92.1	11
37	d1cuka2		Alignment	not modelled	91.0	21
38	d2bcqa1		Alignment	not modelled	90.1	22
39	d2fmpa1		Alignment	not modelled	89.5	14
40	d1jmsa1		Alignment	not modelled	89.2	16
41	d1dgsa1		Alignment	not modelled	88.8	20
42	d2bgwa1		Alignment	not modelled	88.7	25
43	c1hjpA		Alignment	not modelled	88.0	24
44	c1nomA		Alignment	not modelled	86.9	30
45	d2i1qqa1		Alignment	not modelled	86.5	22
46	d1szpa1		Alignment	not modelled	85.9	22
47	d1x2ia1		Alignment	not modelled	85.8	10
48	d1nzpa		Alignment	not modelled	84.8	27
49	d1pzna1		Alignment	not modelled	82.4	28
50	d1kfta		Alignment	not modelled	82.1	12
51	c1kftA		Alignment	not modelled	82.1	12
52	c1dgsB		Alignment	not modelled	82.0	27
53	c2owoA		Alignment	not modelled	81.7	29
54	c2w9mB		Alignment	not modelled	81.6	19
55	d1dk2a		Alignment	not modelled	81.0	16

						Family: DNA polymerase beta, N-terminal domain-like
56	d2fmpa2	Alignment	not modelled	80.7	25	Fold: SAM domain-like Superfamily: PsbU/PolX domain-like Family: DNA polymerase beta-like, second domain
57	d2bcqa2	Alignment	not modelled	79.9	17	Fold: SAM domain-like Superfamily: PsbU/PolX domain-like Family: DNA polymerase beta-like, second domain
58	d2a1jb1	Alignment	not modelled	79.8	12	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
59	d2edua1	Alignment	not modelled	79.3	22	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: ComEA-like
60	d2aq0a1	Alignment	not modelled	78.9	14	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
61	d2axtu1	Alignment	not modelled	78.3	13	Fold: SAM domain-like Superfamily: PsbU/PolX domain-like Family: PsbU-like
62	c1v9pB_	Alignment	not modelled	77.8	27	PDB header: ligase Chain: B: PDB Molecule: dna ligase; PDBTitle: crystal structure of nad+-dependent dna ligase
63	d1jmsa3	Alignment	not modelled	77.4	21	Fold: SAM domain-like Superfamily: PsbU/PolX domain-like Family: DNA polymerase beta-like, second domain
64	d2vana1	Alignment	not modelled	77.1	22	Fold: SAM domain-like Superfamily: PsbU/PolX domain-like Family: DNA polymerase beta-like, second domain
65	d2csba3	Alignment	not modelled	73.7	32	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Topoisomerase V repeat domain
66	c1s5lu_	Alignment	not modelled	73.7	15	PDB header: photosynthesis Chain: U: PDB Molecule: photosystem ii 12 kda extrinsic protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
67	d1mc8a1	Alignment	not modelled	73.6	44	Fold: SAM domain-like Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
68	d1a77a1	Alignment	not modelled	73.6	31	Fold: SAM domain-like Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
69	d3bzka1	Alignment	not modelled	73.0	18	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Tex HhH-containing domain-like
70	d2duya1	Alignment	not modelled	72.2	32	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: ComEA-like
71	d2hkja1	Alignment	not modelled	71.6	26	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Topoisomerase VI-B subunit middle domain
72	d1b43a1	Alignment	not modelled	71.5	44	Fold: SAM domain-like Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
73	c1b22A_	Alignment	not modelled	71.1	22	PDB header: dna binding protein Chain: A: PDB Molecule: dna repair protein rad51; PDBTitle: rad51 (n-terminal domain)
74	d1b22a_	Alignment	not modelled	71.1	22	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
75	d1szpb1	Alignment	not modelled	70.0	22	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
76	d1ee8a1	Alignment	not modelled	69.7	19	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins PDB header: hydrolase
77	c2kp7A_	Alignment	not modelled	69.1	12	Chain: A: PDB Molecule: crossover junction endonuclease mus81; PDBTitle: solution nmr structure of the mus81 n-terminal hhh.2 northeast structural genomics consortium target mmtl1
78	d1lb2b_	Alignment	not modelled	67.7	17	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
79	d1rxwa1	Alignment	not modelled	67.4	21	Fold: SAM domain-like Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
80	d1i94m_	Alignment	not modelled	66.2	25	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Ribosomal protein S13
81	d1cooa_	Alignment	not modelled	66.0	17	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
82	d1gm5a2	Alignment	not modelled	65.0	15	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: RecG "wedge" domain
						Fold: SAM domain-like

83	d1xola1	Alignment	not modelled	64.8	23	Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
84	d1z3eb1	Alignment	not modelled	64.3	11	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
85	c2oceA_	Alignment	not modelled	63.2	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein pa5201; PDBTitle: crystal structure of tex family protein pa5201 from2 pseudomonas aeruginosa
86	d1dqqa_	Alignment	not modelled	61.6	33	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
87	c3iz6M_	Alignment	not modelled	60.6	18	PDB header: ribosome Chain: M: PDB Molecule: 40s ribosomal protein s18 (s13p); PDBTitle: localization of the small subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
88	d1y88a1	Alignment	not modelled	59.2	23	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: Hypothetical protein AF1548, C-terminal domain
89	c2qddA_	Alignment	not modelled	58.4	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: mandelate racemase/muconate lactonizing enzyme; PDBTitle: crystal structure of a member of enolase superfamily from roseovarius2 nubinhibens ism
90	d1ul1x1	Alignment	not modelled	58.0	31	Fold: SAM domain-like Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
91	d2uubm1	Alignment	not modelled	57.9	25	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Ribosomal protein S13
92	c2xznM_	Alignment	not modelled	57.5	20	PDB header: ribosome Chain: M: PDB Molecule: rps18e; 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
93	d1cmwa1	Alignment	not modelled	56.6	56	Fold: SAM domain-like Superfamily: 5' to 3' exonuclease, C-terminal subdomain Family: 5' to 3' exonuclease, C-terminal subdomain
94	clut8B_	Alignment	not modelled	54.8	23	PDB header: hydrolase Chain: B: PDB Molecule: exodeoxyribonuclease; PDBTitle: divalent metal ions (zinc) bound to t5 5'-exonuclease
95	c2bhnd_	Alignment	not modelled	52.1	22	PDB header: hydrolase Chain: D: PDB Molecule: xpf endonuclease; PDBTitle: xpf from aeropyrum pernix
96	c3psiA_	Alignment	not modelled	51.6	18	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt6; PDBTitle: crystal structure of the spt6 core domain from saccharomyces2 cerevisiae, form spt6(239-1451)
97	c1ee8A_	Alignment	not modelled	50.2	20	PDB header: dna binding protein Chain: A: PDB Molecule: mutm (fpg) protein; PDBTitle: crystal structure of mutm (fpg) protein from thermus thermophilus hb8
98	d2gy9m1	Alignment	not modelled	49.2	24	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Ribosomal protein S13
99	c2zkqm_	Alignment	not modelled	49.0	14	PDB header: ribosomal protein/rna Chain: M: PDB Molecule: PDBTitle: structure of a mammalian ribosomal 40s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
100	d1tdza1	Alignment	not modelled	48.1	8	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
101	d1r2za1	Alignment	not modelled	46.6	17	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
102	c2izoA_	Alignment	not modelled	45.5	29	PDB header: hydrolase Chain: A: PDB Molecule: flap structure-specific endonuclease; PDBTitle: structure of an archaeal pcna1-pcna2-fen1 complex
103	c1a77A_	Alignment	not modelled	44.6	40	PDB header: 5'-3' exo/endo nuclease Chain: A: PDB Molecule: flap endonuclease-1 protein; PDBTitle: flap endonuclease-1 from methanococcus jannaschii
104	c1b43A_	Alignment	not modelled	43.8	40	PDB header: transferase Chain: A: PDB Molecule: protein (fen-1); PDBTitle: fen-1 from p. furiosus
105	d1k82a1	Alignment	not modelled	43.5	16	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
106	d1d8ba_	Alignment	not modelled	42.6	6	Fold: SAM domain-like Superfamily: HRDC-like Family: HRDC domain from helicases
107	c3q8IA_	Alignment	not modelled	41.7	40	PDB header: hydrolase/dna Chain: A: PDB Molecule: flap endonuclease 1; PDBTitle: crystal structure of human flap endonuclease fen1 (wt) in complex with2 substrate 5'-flap dna, sm3+, and k+
108	c3psfA_	Alignment	not modelled	40.1	18	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt6; PDBTitle: crystal structure of the spt6 core domain from saccharomyces2 cerevisiae, form spt6(236-1259)
109	c2i5ha	Alignment	not modelled	39.5	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein af1531;

109	c2i5ha	Alignment	not modelled	39.5	24	PDBTitle: crystal structure of af1531 from archaeoglobus fulgidus,2 pfam duf655
110	d2i5ha1	Alignment	not modelled	39.5	24	Fold: AF1531-like Superfamily: AF1531-like Family: AF1531-like
111	c1rxvA	Alignment	not modelled	37.9	21	PDB header: hydrolase/dna Chain: A: PDB Molecule: flap structure-specific endonuclease; PDBTitle: crystal structure of a. fulgidus fen-1 bound to dna
112	c3oryA	Alignment	not modelled	37.8	50	PDB header: hydrolase Chain: A: PDB Molecule: flap endonuclease 1; PDBTitle: crystal structure of flap endonuclease 1 from hyperthermophilic2 archaeon desulfurococcus amylolyticus
113	c2ihna	Alignment	not modelled	35.4	0	PDB header: hydrolase/dna Chain: A: PDB Molecule: ribonuclease h; PDBTitle: co-crystal of bacteriophage t4 rnase h with a fork dna2 substrate
114	c2jg6A	Alignment	not modelled	34.5	21	PDB header: hydrolase Chain: A: PDB Molecule: dna-3-methyladenine glycosidase; PDBTitle: crystal structure of a 3-methyladenine dna glycosylase i2 from staphylococcus aureus
115	c2nqlB	Alignment	not modelled	34.3	13	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: isomerase/lactonizing enzyme; PDBTitle: crystal structure of a member of the enolase superfamily from2 agrobacterium tumefaciens
116	c1ul1Y	Alignment	not modelled	33.4	40	PDB header: hydrolase/dna binding protein Chain: Y: PDB Molecule: flap endonuclease-1; PDBTitle: crystal structure of the human fen1-pcna complex
117	c2ziua	Alignment	not modelled	31.6	18	PDB header: hydrolase Chain: A: PDB Molecule: mus81 protein; PDBTitle: crystal structure of the mus81-eme1 complex
118	c2rrda	Alignment	not modelled	31.5	11	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
119	d1nkua	Alignment	not modelled	31.2	22	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: 3-Methyladenine DNA glycosylase I (Tag)
120	c3c1za	Alignment	not modelled	30.0	21	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