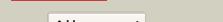
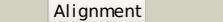
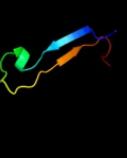
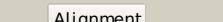
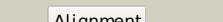
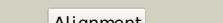
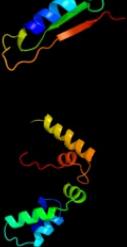
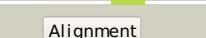
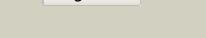
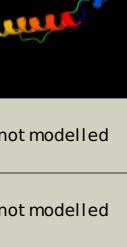
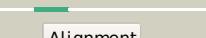
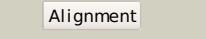
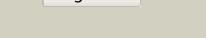


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P30870
Date	Thu Jan 5 11:46:43 GMT 2012
Unique Job ID	f5ee813292741547

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3k7dA_			100.0	100	PDB header: transferase Chain: A; PDB Molecule: glutamate-ammonia-ligase adenyllyltransferase; PDBTitle: c-terminal (adenylation) domain of e.coli glutamine synthetase2 adenyllyltransferase
2	c1v4aA_			100.0	97	PDB header: transferase Chain: A; PDB Molecule: glutamate-ammonia-ligase adenyllyltransferase; PDBTitle: structure of the n-terminal domain of escherichia coli2 glutamine synthetase adenyllyltransferase
3	d1v4aa2			100.0	97	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: GlnE-like domain
4	d1v4aa1			100.0	97	Fold: Four-helical up-and-down bundle Superfamily: Nucleotidyltransferase substrate binding subunit/domain Family: Glutamine synthase adenyllyltransferase GlnE, domain 2
5	d1knya2			95.7	22	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Kanamycin nucleotidyltransferase (KNTase), N-terminal domain
6	c1knya_			95.0	22	PDB header: transferase Chain: A; PDB Molecule: kanamycin nucleotidyltransferase; PDBTitle: kanamycin nucleotidyltransferase
7	c2rffA_			93.7	19	PDB header: transferase Chain: A; PDB Molecule: putative nucleotidyltransferase; PDBTitle: crystal structure of a putative nucleotidyltransferase2 (np_343093.1) from sulfolobus solfataricus at 1.40 a3 resolution
8	d1no5a_			91.0	26	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
9	d1wota_			89.1	31	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
10	c3c66B_			87.3	15	PDB header: transferase Chain: B; PDB Molecule: poly(a) polymerase; PDBTitle: yeast poly(a) polymerase in complex with fip1 residues 80-105
11	c1q78A_			86.5	14	PDB header: transferase Chain: A; PDB Molecule: poly(a) polymerase alpha; PDBTitle: crystal structure of poly(a) polymerase in complex with 3'-2' dntp and magnesium chloride

12	d1ylqal			85.1	27	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Catalytic subunit of bi-partite nucleotidyltransferase
13	c3jz0B			76.8	20	PDB header: transferase/antibiotic Chain: B: PDB Molecule: lincosamide nucleotidyltransferase; PDBTitle: lnb complexed with clindamycin and ampcpp
14	c3o7kA			69.4	21	PDB header: lyase Chain: A: PDB Molecule: ohcu decarboxylase; PDBTitle: crystal structure of 2-oxo-4-hydroxy-4-carboxy-5-ureidoimidazoline2 decarboxylase from klebsiella pneumoniae
15	d1q79a2			66.9	14	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly(A) polymerase, PAP, N-terminal domain
16	c1kdha			60.8	13	PDB header: transferase/dna Chain: A: PDB Molecule: terminal deoxynucleotidyltransferase short PDBTitle: binary complex of murine terminal deoxynucleotidyl2 transferase with a primer single stranded dna
17	d2o70a1			57.8	18	Fold: UraD-like Superfamily: UraD-Like Family: UraD-like
18	d2q66a2			57.2	12	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Poly(A) polymerase, PAP, N-terminal domain
19	c3hvzb			55.9	12	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the tgs domain of the clolepl_03100 protein from2 clostridium leptum, northeast structural genomics consortium target3 qlr13a
20	c1sz1A			54.5	20	PDB header: transferase/rna Chain: A: PDB Molecule: tRNA nucleotidyltransferase; PDBTitle: mechanism of cca-adding enzymes specificity revealed by crystal2 structures of ternary complexes
21	d1r89a2		not modelled	49.5	18	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: Archaeal tRNA CCA-adding enzyme catalytic domain
22	d2fmpa3		not modelled	47.1	10	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
23	d1d5ya2		not modelled	47.1	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Arac type transcriptional activator
24	c3r66A		not modelled	44.0	13	PDB header: viral protein/antiviral protein Chain: A: PDB Molecule: non-structural protein 1; PDBTitle: crystal structure of human isg15 in complex with ns1 n-terminal region2 from influenza virus b, northeast structural genomics consortium3 target ids hx6481, hr2873, and or2
25	d2bcqa3		not modelled	43.9	17	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
26	d2vana2		not modelled	42.0	13	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
27	d1xeqa1		not modelled	39.7	13	Fold: S15/NS1 RNA-binding domain Superfamily: S15/NS1 RNA-binding domain Family: N-terminal, RNA-binding domain of nonstructural protein NS1
28	d1jqra		not modelled	39.6	33	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
						PDB header: hydrolase

29	c2kmmA	Alignment	not modelled	36.4	13	Chain: A: PDB Molecule: guanosine-3',5'-bis(diphosphate) 3'- PDBTitle: solution nmr structure of the tgs domain of pg1808 from2 porphyromonas gingivalis. northeast structural genomics3 consortium target pgr122a (418-481)
30	d1bl0a2	Alignment	not modelled	34.8	26	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: AraC type transcriptional activator
31	d1phna	Alignment	not modelled	33.1	16	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
32	c2q0dA	Alignment	not modelled	30.9	15	PDB header: transferase Chain: A: PDB Molecule: rna uridylyl transferase; PDBTitle: terminal uridylyl transferase 4 from trypanosoma brucei2 with bound atp
33	d1jmsa4	Alignment	not modelled	29.8	14	Fold: Nucleotidyltransferase Superfamily: Nucleotidyltransferase Family: DNA polymerase beta-like
34	c3ng3A	Alignment	not modelled	29.5	25	PDB header: lyase Chain: A: PDB Molecule: deoxyribose-phosphate aldolase; PDBTitle: crystal structure of deoxyribose phosphate aldolase from mycobacterium2 avium 104 in a schiff base with an unknown aldehyde
35	d1vi7a1	Alignment	not modelled	28.1	35	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: YigZ N-terminal domain-like
36	c2dt5A	Alignment	not modelled	25.2	28	PDB header: dna binding protein Chain: A: PDB Molecule: at-rich dna-binding protein; PDBTitle: crystal structure of ttha1657 (at-rich dna-binding protein) from2 thermus thermophilus hb8
37	c1nomA	Alignment	not modelled	24.6	14	PDB header: nucleotidyltransferase Chain: A: PDB Molecule: dna polymerase beta; PDBTitle: dna polymerase beta (pol b) (e.c.2.7.7.7), 31-kd domain; soaked in the2 presence of mnc12 (5 millimolar)
38	d2dt5a2	Alignment	not modelled	23.8	28	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Transcriptional repressor Rex, C-terminal domain
39	d2cvea1	Alignment	not modelled	23.6	44	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: YigZ N-terminal domain-like
40	c3f2eA	Alignment	not modelled	23.3	19	PDB header: viral protein Chain: A: PDB Molecule: sirv coat protein; PDBTitle: crystal structure of yellowstone sirv coat protein c-2 terminus
41	d2b8ta1	Alignment	not modelled	22.4	15	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Type II thymidine kinase
42	d1o0ya	Alignment	not modelled	22.4	22	Fold: TIM beta/alpha-barrel Superfamily: Alidolase Family: Class I alidolase
43	c3hiyA	Alignment	not modelled	21.8	14	PDB header: transferase Chain: A: PDB Molecule: minor editosome-associated tutase; PDBTitle: minor editosome-associated tutase 1 with bound utp and mg
44	d1cpca	Alignment	not modelled	21.4	14	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
45	d1qmga2	Alignment	not modelled	20.6	23	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
46	c3ngjC	Alignment	not modelled	20.4	22	PDB header: lyase Chain: C: PDB Molecule: deoxyribose-phosphate aldolase; PDBTitle: crystal structure of a putative deoxyribose-phosphate aldolase from2 entamoeba histolytica
47	c3nybA	Alignment	not modelled	18.2	11	PDB header: transferase/rna binding protein Chain: A: PDB Molecule: poly(a) rna polymerase protein 2; PDBTitle: structure and function of the polymerase core of tramp, a rna2 surveillance complex
48	c2ihmA	Alignment	not modelled	18.1	14	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
49	c2b8tA	Alignment	not modelled	17.9	15	PDB header: transferase Chain: A: PDB Molecule: thymidine kinase; PDBTitle: crystal structure of thymidine kinase from u.urealyticum in2 complex with thymidine
50	d1pvea	Alignment	not modelled	17.2	13	Fold: XPC-binding domain Superfamily: XPC-binding domain Family: XPC-binding domain
51	d1r8ka	Alignment	not modelled	16.6	23	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: PdxA-like
52	d1sfla	Alignment	not modelled	16.5	16	Fold: TIM beta/alpha-barrel Superfamily: Alidolase Family: Class I alidolase
53	c8icza	Alignment	not modelled	16.1	11	PDB header: transferase/dna Chain: A: PDB Molecule: protein (dna polymerase beta (e.c.2.7.7.7)); PDBTitle: dna polymerase beta (pol b) (e.c.2.7.7.7) complexed with2 seven base pairs of dna; soaked in the presence of of dtp3 (1 millimolar), mnc12 (5 millimolar), and lithium sulfate4 (75 millimolar)
54	c3bcua	Alignment	not modelled	15.7	22	PDB header: transferase, lyase/dna Chain: A: PDB Molecule: dna polymerase lambda;

54	c2dum	Alignment	not modelled	15.7	22	PDBTitle: dna polymerase lambda in complex with a dna duplex2 containing an unpaired damp and a tt mismatch
55	c2a4aB	Alignment	not modelled	15.5	18	PDB header: lyase Chain: B: PDB Molecule: deoxyribose-phosphate aldolase; PDBTitle: deoxyribose-phosphate aldolase from p. yoelii
56	clug9A	Alignment	not modelled	15.3	23	PDB header: hydrolase Chain: A: PDB Molecule: glucodextranase; PDBTitle: crystal structure of glucodextranase from arthrobacter globiformis i42
57	c2xvcA	Alignment	not modelled	15.3	38	PDB header: cell cycle Chain: A: PDB Molecule: escrt-iii; PDBTitle: molecular and structural basis of escrt-iii recruitment to2 membranes during archaeal cell division
58	c2jq5A	Alignment	not modelled	14.9	17	PDB header: structural genomics Chain: A: PDB Molecule: sec-c motif; PDBTitle: solution structure of rpa3114, a sec-c motif containing2 protein from rhodopseudomonas palustris; northeast3 structural genomics consortium target rpt5 / ontario4 center for structural proteomics target rp3097
59	c1titB	Alignment	not modelled	14.9	22	PDB header: oxidoreductase Chain: B: PDB Molecule: putative oxidoreductase (virulence factor mvim homolog); PDBTitle: crystal structure of a putative oxidoreductase (virulence factor mvim2 homolog)
60	d1ha7a	Alignment	not modelled	14.8	13	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
61	d1qta	Alignment	not modelled	14.6	25	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: Xylose isomerase
62	c2j96B	Alignment	not modelled	14.5	13	PDB header: photosynthesis Chain: B: PDB Molecule: phycoerythrocyanin alpha chain; PDBTitle: the e-configuration of alfa-phycoerythrocyanin
63	d1mzha	Alignment	not modelled	14.4	28	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
64	c1yybA	Alignment	not modelled	13.3	24	PDB header: apoptosis Chain: A: PDB Molecule: programmed cell death protein 5; PDBTitle: solution structure of 1-26 fragment of human programmed2 cell death 5 protein
65	c3I9cA	Alignment	not modelled	13.1	31	PDB header: lyase Chain: A: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: the crystal structure of smu.777 from streptococcus mutans ua159
66	c3pq1A	Alignment	not modelled	13.1	11	PDB header: transferase Chain: A: PDB Molecule: poly(a) rna polymerase; PDBTitle: crystal structure of human mitochondrial poly(a) polymerase (papd1)
67	c2gf5A	Alignment	not modelled	13.0	14	PDB header: apoptosis Chain: A: PDB Molecule: fadd protein; PDBTitle: structure of intact fadd (mort1)
68	c2ocza	Alignment	not modelled	12.9	15	PDB header: lyase Chain: A: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: the structure of a putative 3-dehydroquinate dehydratase from streptococcus pyogenes.
69	c1vh6A	Alignment	not modelled	12.8	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: flagellar protein fls; PDBTitle: crystal structure of a flagellar protein
70	d1vh6a	Alignment	not modelled	12.8	10	Fold: Four-helical up-and-down bundle Superfamily: Flagellar export chaperone Fls Family: Flagellar export chaperone Fls
71	c3oa3A	Alignment	not modelled	12.7	26	PDB header: lyase Chain: A: PDB Molecule: aldolase; PDBTitle: crystal structure of a putative deoxyribose-phosphate aldolase from2 coccidioides immitis
72	d1qya3	Alignment	not modelled	12.7	17	Fold: XPC-binding domain Superfamily: XPC-binding domain Family: XPC-binding domain
73	clyveK	Alignment	not modelled	12.6	23	PDB header: oxidoreductase Chain: K: PDB Molecule: acetohydroxy acid isomeroreductase; PDBTitle: acetohydroxy acid isomeroreductase complexed with nadph,2 magnesium and inhibitor ipoha (n-hydroxy-n-3 isopropylxamate)
74	c2g5xA	Alignment	not modelled	12.5	3	PDB header: hydrolase Chain: A: PDB Molecule: ribosome-inactivating protein; PDBTitle: crystal structure of lychnin a type 1 ribosome inactivating2 protein (rip)
75	d1sc6a1	Alignment	not modelled	12.5	22	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Formate/glycerate dehydrogenases, NAD-domain
76	c1wr1B	Alignment	not modelled	12.4	22	PDB header: signaling protein Chain: B: PDB Molecule: ubiquitin-like protein dsk2; PDBTitle: the complex sturcture of dsk2p uba with ubiquitin
77	c2of5A	Alignment	not modelled	12.4	17	PDB header: apoptosis Chain: A: PDB Molecule: death domain-containing protein cradd; PDBTitle: oligomeric death domain complex
78	c1wxpa	Alignment	not modelled	12.3	13	PDB header: transport protein Chain: A: PDB Molecule: tho complex subunit 1; PDBTitle: solution structure of the death domain of nuclear matrix2 protein p84
79	d1gqna	Alignment	not modelled	12.1	9	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
						PDB header: ligase/rna

80	c1f7uA_	Alignment	not modelled	11.8	19	Chain: A: PDB Molecule: arginyl-tRNA synthetase; PDBTitle: crystal structure of the arginyl-tRNA synthetase complexed with the tRNA(arginine) and L-arginine
81	d2fi0a1	Alignment	not modelled	11.8	17	Fold: SP0561-like Superfamily: SP0561-like Family: SP0561-like
82	c3iwfa_	Alignment	not modelled	11.7	15	PDB header: transcription regulator Chain: A: PDB Molecule: transcription regulator rpir family; PDBTitle: the crystal structure of the N-terminal domain of a rpir2 transcriptional regulator from staphylococcus epidermidis to 1.4a
83	c1hlvA_	Alignment	not modelled	11.7	14	PDB header: dna binding protein/dna Chain: A: PDB Molecule: major centromere autoantigen b; PDBTitle: crystal structure of cenp-b(1-129) complexed with the cnp-2 b box dna
84	d2f4mb1	Alignment	not modelled	11.6	13	Fold: XPC-binding domain Superfamily: XPC-binding domain Family: XPC-binding domain
85	d1qm4a2	Alignment	not modelled	11.6	18	Fold: S-adenosylmethionine synthetase Superfamily: S-adenosylmethionine synthetase Family: S-adenosylmethionine synthetase
86	d1plxa_	Alignment	not modelled	11.5	25	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
87	d1hlva2	Alignment	not modelled	11.4	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Centromere-binding
88	d1qp8a1	Alignment	not modelled	11.4	22	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Formate/glycerate dehydrogenases, NAD-domain
89	c1x3wb_	Alignment	not modelled	11.3	24	PDB header: hydrolase Chain: B: PDB Molecule: uv excision repair protein rad23; PDBTitle: structure of a peptide:n-glycanase-rad23 complex
90	d1np3a2	Alignment	not modelled	11.2	43	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
91	d1kn1a_	Alignment	not modelled	11.2	5	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
92	c2ytuA_	Alignment	not modelled	11.1	15	PDB header: signaling protein Chain: A: PDB Molecule: friend leukemia integration 1 transcription PDBTitle: solution structure of the SAM_PNT-domain of the human friend leukemia integration 1 transcription factor
93	d1jboa_	Alignment	not modelled	11.0	17	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
94	d1mxaa2	Alignment	not modelled	10.9	24	Fold: S-adenosylmethionine synthetase Superfamily: S-adenosylmethionine synthetase Family: S-adenosylmethionine synthetase
95	d1dxya1	Alignment	not modelled	10.6	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Formate/glycerate dehydrogenases, NAD-domain
96	c2cveA_	Alignment	not modelled	10.6	75	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein tt1053; PDBTitle: crystal structure of a conserved hypothetical protein tt1547 from Thermus thermophilus hb8
97	c2vq3B_	Alignment	not modelled	10.6	15	PDB header: oxidoreductase Chain: B: PDB Molecule: metalloreductase steap3; PDBTitle: crystal structure of the membrane proximal oxidoreductase2 domain of human steap3, the dominant ferric reductase of the erythroid transferrin cycle
98	c3d19E_	Alignment	not modelled	10.4	16	PDB header: structural genomics, unknown function Chain: E: PDB Molecule: conserved metalloprotein; PDBTitle: crystal structure of a conserved metalloprotein from bacillus cereus
99	c3l2iB_	Alignment	not modelled	10.4	25	PDB header: lyase Chain: B: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: 1.85 angstrom crystal structure of the 3-dehydroquinate dehydratase2 (aroD) from salmonella typhimurium lt2.