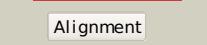
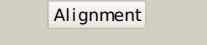


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P76542
Date	Thu Jan 5 12:24:15 GMT 2012
Unique Job ID	fe095f5ae688cad8

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1z1bA			100.0	17	PDB header: dna binding protein/dna Chain: A: PDB Molecule: integrase; PDBTitle: crystal structure of a lambda integrase dimer bound to a2 coc' core site
2	d1p7da			100.0	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
3	c1ma7A			99.9	16	PDB header: hydrolase, ligase/dna Chain: A: PDB Molecule: cre recombinase; PDBTitle: crystal structure of cre site-specific recombinase2 complexed with a mutant dna substrate, loxp-a8/t27
4	c1crxA			99.9	15	PDB header: replication/dna Chain: A: PDB Molecule: cre recombinase; PDBTitle: cre recombinase/dna complex reaction intermediate i
5	c2a3vA			99.9	16	PDB header: recombination Chain: A: PDB Molecule: site-specific recombinase int4; PDBTitle: structural basis for broad dna-specificity in integron2 recombination
6	c3nkhB			99.9	15	PDB header: recombination Chain: B: PDB Molecule: integrase; PDBTitle: crystal structure of integrase from mrsa strain staphylococcus aureus
7	c1a0pA			99.9	16	PDB header: dna recombination Chain: A: PDB Molecule: site-specific recombinase xerd; PDBTitle: site-specific recombinase, xerd
8	d1aiha			99.9	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
9	c3ju0A			99.8	43	PDB header: dna binding protein Chain: A: PDB Molecule: phage integrase; PDBTitle: structure of the arm-type binding domain of hai7 integrase
10	d1f44a2			99.8	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
11	d1a0pa2			99.8	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core

12	c3jtzA			99.8	41	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: structure of the arm-type binding domain of hpi integrase
13	d1ae9a			99.8	18	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
14	d5crxb2			99.6	17	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
15	c2kiwA			98.9	18	PDB header: dna binding protein Chain: A: PDB Molecule: int protein; PDBTitle: solution nmr structure of the domain n-terminal to the2 integrase domain of sh1003 from staphylococcus3 haemolyticus. northeast structural genomics consortium4 target shr105f (64-166).
16	c2kj8A			98.9	31	PDB header: dna binding protein Chain: A: PDB Molecule: putative prophage cps-53 integrase; PDBTitle: nmr structure of fragment 87-196 from the putative phage2 integrase ints of e. coli: northeast structural genomics3 consortium target er652a, psi-2
17	c2kj9A			98.8	30	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: nmr structure of intb phage-integrase-like protein fragment2 90-199 from erwinia carotovora subsp. atroseptica: northeast3 structural genomics consortium target ewr217e
18	c2khvA			98.8	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of protein nmul_a0922 from2 nitrosospira multiformis. northeast structural genomics3 consortium target nmr38b.
19	c2kd1A			98.8	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dna integration/recombination/inversion protein; PDBTitle: solution nmr structure of the integrase-like domain from2 bacillus cereus ordered locus bc_1272. northeast3 structural genomics consortium target bcr268f
20	c2kkvA			98.8	24	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: solution nmr structure of an integrase domain from protein2 spa4288 from salmonella enterica, northeast structural3 genomics consortium target slr105h
21	c2khqA		not modelled	98.7	22	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: solution nmr structure of a phage integrase ssp19472 fragment 59-159 from staphylococcus saprophyticus,3 northeast structural genomics consortium target syr103b
22	c2kobA		not modelled	98.7	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of clolep_01837 (fragment 61-160)2 from clostridium leptum. northeast structural genomics3 consortium target qlr8a
23	c2kkpA		not modelled	98.7	16	PDB header: dna binding protein Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of the phage integrase sam-like2 domain from moth 1796 from moorella thermoacetica,3 northeast structural genomics consortium target mtr39k4 (residues 64-171).
24	c3lysC		not modelled	98.6	15	PDB header: recombination Chain: C: PDB Molecule: prophage pi2 protein 01, integrase; PDBTitle: crystal structure of the n-terminal domain of the prophage2 pi2 protein 01 (integrase) from lactococcus lactis,3 northeast structural genomics consortium target kr124f
25	c2kj5A		not modelled	98.6	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of a domain from a putative phage2 integrase protein nmul_a0064 from nitrosospira multiformis,3 northeast structural genomics consortium target nmr46c
26	c2oxoA		not modelled	98.6	19	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: crystallization and structure determination of the core-2 binding domain of bacteriophage lambda integrase PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative phage integrase;

27	c2keyA		Alignment	not modelled	98.3	13	PDB Title: solution nmr structure of a domain from a putative phage integrase2 protein bf2284 from bacteroides fragilis, northeast structural3 genomics consortium target bfr257c PDB header: recombination Chain: A: PDB Molecule: phage integrase/site-specific recombinase; PDBTitle: crystal structure of the n-terminal domain of phage integrase/site-2 specific recombinase (tnp) from haloarcula marismortui, northeast3 structural genomics consortium target hmr208a
28	c3nrwA		Alignment	not modelled	97.9	9	 PDB header: hydrolyase Chain: B: PDB Molecule: protelomerase; PDBTitle: telomerase telk complexed with substrate dna
29	c2v6eB		Alignment	not modelled	97.8	15	 Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
30	d1a0pa1		Alignment	not modelled	96.2	16	 PDB header: isomerase Chain: A: PDB Molecule: type i topoisomerase, putative; PDBTitle: crystal structure of deinococcus radiodurans topoisomerase ib
31	c2f4qA		Alignment	not modelled	96.2	19	 PDB header: isomerase/dna Chain: X: PDB Molecule: dna topoisomerase 1; PDBTitle: structure of variola topoisomerase covalently bound to dna
32	c2h7fx		Alignment	not modelled	94.2	15	 PDB header: isomerase/dna Chain: A: PDB Molecule: topoisomerase i-like protein; PDBTitle: crystal structure of heterodimeric l. donovani2 topoisomerase i-vanadate-dna complex
33	c2b9sA		Alignment	not modelled	92.9	24	 Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
34	d1k4ta2		Alignment	not modelled	92.4	27	 Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
35	d1rr8c1		Alignment	not modelled	90.7	27	 Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
36	c3igmA		Alignment	not modelled	86.7	15	 PDB header: transcription/dna Chain: A: PDB Molecule: pf14_0633 protein; PDBTitle: a 2.2a crystal structure of the ap2 domain of pf14_0633 from p.2 falciparum, bound as a domain-swapped dimer to its cognate dna
37	c1a31A		Alignment	not modelled	83.4	26	 PDB header: isomerase/dna Chain: A: PDB Molecule: protein (topoisomerase i); PDBTitle: human reconstituted dna topoisomerase i in covalent complex2 with a 22 base pair dna duplex
38	c1nh3A		Alignment	not modelled	80.3	27	 PDB header: isomerase/dna Chain: A: PDB Molecule: dna topoisomerase i; PDBTitle: human topoisomerase i ara-c complex
39	d1a41a		Alignment	not modelled	78.9	15	 Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
40	d1f44a1		Alignment	not modelled	77.1	14	 Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
41	d1gcca		Alignment	not modelled	74.2	14	 Fold: DNA-binding domain Superfamily: DNA-binding domain Family: GCC-box binding domain
42	d1z1ba1		Alignment	not modelled	64.5	22	 Fold: DNA-binding domain Superfamily: DNA-binding domain Family: lambda integrase N-terminal domain
43	c1kjka		Alignment	not modelled	64.5	22	 PDB header: viral protein Chain: A: PDB Molecule: integrase; PDBTitle: solution structure of the lambda integrase amino-terminal2 domain
44	d1qu6a2		Alignment	not modelled	44.2	18	 Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
45	d1x48a1		Alignment	not modelled	35.0	15	 Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
46	d2gf5a1		Alignment	not modelled	30.9	11	 Fold: DEATH domain Superfamily: DEATH domain Family: DEATH domain, DD
47	d1x49a1		Alignment	not modelled	26.0	26	 Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
48	c2khxA		Alignment	not modelled	23.6	14	 PDB header: gene regulation,nuclear protein Chain: A: PDB Molecule: ribonuclease 3; PDBTitle: drosha double-stranded rna binding motif
49	c2kq6A		Alignment	not modelled	18.1	10	 PDB header: transport protein Chain: A: PDB Molecule: polycystin-2; PDBTitle: the structure of the ef-hand domain of polycystin-2 suggests a2+ mechanism for ca2+-dependent regulation of polycystin-2 channel3 activity
50	d1qu6a1		Alignment	not modelled	17.6	27	 Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
51	c3epsB		Alignment	not modelled	16.6	24	 PDB header: transferase, hydrolase Chain: B: PDB Molecule: isocitrate dehydrogenase kinase/phosphatase; PDBTitle: the crystal structure of isocitrate dehydrogenase kinase/phosphatase2 from e. coli
52	d1x47a1		Alignment	not modelled	16.0	11	 Fold: dsRBD-like Superfamily: dsRNA-binding domain-like

					Family: Double-stranded RNA-binding domain (dsRBD)
53	d1o0wa2	Alignment	not modelled	13.7	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
54	d1bb8a_	Alignment	not modelled	13.4	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: DNA-binding domain from tn916 integrase
55	c2kleA_	Alignment	not modelled	12.6	PDB header: membrane protein Chain: A: PDB Molecule: polycystin-2; PDBTitle: isic refined solution structure of the calcium binding2 domain of the c-terminal cytosolic domain of polycystin-2
56	c3adjA_	Alignment	not modelled	11.2	PDB header: gene regulation Chain: A: PDB Molecule: f21m12.9 protein; PDBTitle: structure of arabidopsis hyl1 and its molecular implications for mirna2 processing
57	c3adiC_	Alignment	not modelled	11.2	PDB header: gene regulation/rna Chain: C: PDB Molecule: f21m12.9 protein; PDBTitle: structure of arabidopsis hyl1 and its molecular implications for mirna2 processing
58	d1woqa2	Alignment	not modelled	10.6	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK
59	c2yt4A_	Alignment	not modelled	9.6	PDB header: rna binding protein Chain: A: PDB Molecule: protein dgcr8; PDBTitle: crystal structure of human dgcr8 core
60	d2b7va1	Alignment	not modelled	9.4	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
61	d2b7ta1	Alignment	not modelled	8.9	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
62	d1uxca_	Alignment	not modelled	8.9	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
63	d1wjwa_	Alignment	not modelled	8.4	Fold: TBP-like Superfamily: Phosphoglucomutase, C-terminal domain Family: Phosphoglucomutase, C-terminal domain
64	c2zhhA_	Alignment	not modelled	7.8	PDB header: transcription Chain: A: PDB Molecule: redox-sensitive transcriptional activator soxr; PDBTitle: crystal structure of soxr
65	c3ouuA_	Alignment	not modelled	7.6	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lin2118 protein; PDBTitle: the structure of a protein with unkown function from listeria innocua
66	d1r8da_	Alignment	not modelled	7.5	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
67	d2dmja1	Alignment	not modelled	7.5	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
68	c218nA_	Alignment	not modelled	7.4	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
69	c2ae3A_	Alignment	not modelled	6.9	PDB header: hydrolase Chain: A: PDB Molecule: glutaryl 7-aminocephalosporanic acid acylase; PDBTitle: glutaryl 7-aminocephalosporanic acid acylase: mutational study of 2 activation mechanism
70	d2g3ba1	Alignment	not modelled	6.7	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
71	c3ol0C_	Alignment	not modelled	6.7	PDB header: de novo protein Chain: C: PDB Molecule: de novo designed monomer trefoil-fold sub-domain which PDBTitle: crystal structure of monofoil-4p homo-trimer: de novo designed monomer2 trefoil-fold sub-domain which forms homo-trimer assembly
72	d2csba1	Alignment	not modelled	6.4	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Topoisomerase V repeat domain
73	d2g39a2	Alignment	not modelled	6.3	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
74	c2k9sA_	Alignment	not modelled	6.3	PDB header: transcription Chain: A: PDB Molecule: arabinose operon regulatory protein; PDBTitle: solution structure of dna binding domain of e. coli arac
75	c3llhb_	Alignment	not modelled	6.3	PDB header: rna binding protein Chain: B: PDB Molecule: risc-loading complex subunit tarbp2; PDBTitle: crystal structure of the first dsrbd of tar rna-binding protein 2
76	d1uxda_	Alignment	not modelled	6.2	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
77	c3mxnA_	Alignment	not modelled	6.1	PDB header: replication Chain: A: PDB Molecule: recq-mediated genome instability protein 1; PDBTitle: crystal structure of the rmi core complex
78	c2gf5A_	Alignment	not modelled	6.1	PDB header: apoptosis Chain: A: PDB Molecule: fadd protein; PDBTitle: structure of intact fadd (mort1)

79	d1rkta1		Alignment	not modelled	6.0	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
80	c2yqfA_		Alignment	not modelled	6.0	14	PDB header: protein binding Chain: A: PDB Molecule: ankyrin-1; PDBTitle: solution structure of the death domain of ankyrin-1
81	d1u4ga_		Alignment	not modelled	5.9	19	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Thermolysin-like
82	d1j6xa_		Alignment	not modelled	5.9	25	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
83	d1zk8a1		Alignment	not modelled	5.9	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
84	d1bh9b_		Alignment	not modelled	5.7	17	Fold: Histone-fold Superfamily: Histone-fold Family: TBP-associated factors, TAFs
85	c2rrhA_		Alignment	not modelled	5.7	24	PDB header: hormone Chain: A: PDB Molecule: vip peptides; PDBTitle: nmr structure of vasoactive intestinal peptide in methanol
86	d1fada_		Alignment	not modelled	5.5	9	Fold: DEATH domain Superfamily: DEATH domain Family: DEATH domain, DD
87	d2niva1		Alignment	not modelled	5.5	24	Fold: Xisl-like Superfamily: Xisl-like Family: Xisl-like
88	d1vjea_		Alignment	not modelled	5.5	29	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
89	c2l2nA_		Alignment	not modelled	5.4	16	PDB header: rna binding protein, plant protein Chain: A: PDB Molecule: hyponastic leave 1; PDBTitle: backbone 1h, 13c, and 15n chemical shift assignments for the first2 dsrbd of protein hy1
90	d1j6wa_		Alignment	not modelled	5.3	24	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
91	c2ka4B_		Alignment	not modelled	5.3	33	PDB header: transcription regulator Chain: B: PDB Molecule: signal transducer and activator of transcription PDBTitle: nmr structure of the cbp-taz1/stat2-tad complex
92	c1o0wB_		Alignment	not modelled	5.2	22	PDB header: hydrolase Chain: B: PDB Molecule: ribonuclease iii; PDBTitle: crystal structure of ribonuclease iii (tm1102) from2 thermotoga maritima at 2.0 a resolution
93	d2oi8a1		Alignment	not modelled	5.2	12	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
94	d1lcda_		Alignment	not modelled	5.1	13	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator