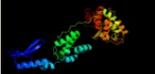
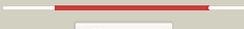
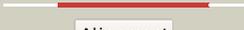
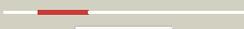
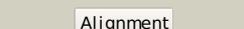
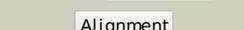
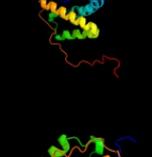
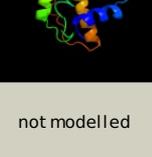


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P37326
Date	Thu Jan 5 11:55:12 GMT 2012
Unique Job ID	e0465743fbb7e9fb

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1z1bA_	 Alignment		100.0	16	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_	 Alignment		99.9	13	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
3	c1ma7A_	 Alignment		99.9	13	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	c2a3vA_	 Alignment		99.9	15	PDB header: recombination Chain: A; PDB Molecule: site-specific recombinase int4; PDBTitle: structural basis for broad dna-specificity in integron2 recombination
5	c1crxA_	 Alignment		99.9	13	PDB header: replication/dna Chain: A; PDB Molecule: cre recombinase; PDBTitle: cre recombinase/dna complex reaction intermediate i
6	c3nkhB_	 Alignment		99.9	16	PDB header: recombination Chain: B; PDB Molecule: integrase; PDBTitle: crystal structure of integrase from mrsa strain staphylococcus aureus
7	c1a0pA_	 Alignment		99.9	14	PDB header: dna recombination Chain: A; PDB Molecule: site-specific recombinase xerd; PDBTitle: site-specific recombinase, xerd
8	c3ju0A_	 Alignment		99.8	37	PDB header: dna binding protein Chain: A; PDB Molecule: phage integrase; PDBTitle: structure of the arm-type binding domain of hai7 integrase
9	c3jtzA_	 Alignment		99.8	38	PDB header: dna binding protein Chain: A; PDB Molecule: integrase; PDBTitle: structure of the arm-type binding domain of hpi integrase
10	d1aiha_	 Alignment		99.8	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
11	d1f44a2	 Alignment		99.7	14	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core

12	d1a0pa2	Alignment		99.7	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
13	d1ae9a_	Alignment		99.7	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
14	d5crxb2	Alignment		99.4	13	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
15	c2kj8A_	Alignment		99.0	98	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
16	c2kj9A_	Alignment		99.0	25	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: nmr structure of intb phage-integrase-like protein fragment2 90-199 from erwinia carotova subsp. atroseptica: northeast3 structural genomics consortium target ewr217e
17	c2kkvA_	Alignment		99.0	26	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
18	c2kiwA_	Alignment		98.9	13	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).
19	c2kd1A_	Alignment		98.8	12	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	c2khqA_	Alignment		98.7	16	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
21	c2oxoA_	Alignment	not modelled	98.7	14	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
22	c2khvA_	Alignment	not modelled	98.7	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of protein nmul_a0922 from2 nitrospira multiformis. northeast structural genomics3 consortium target nmr38b.
23	c2kj5A_	Alignment	not modelled	98.7	25	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 nitrospira multiformis,3 northeast structural genomics consortium target nmr46c
24	c3lysC_	Alignment	not modelled	98.7	14	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	c2kkpA_	Alignment	not modelled	98.6	11	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).
26	c2kobA_	Alignment	not modelled	98.6	18	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
						PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative phage integrase;

27	c2keyA	Alignment	not modelled	98.1	13	PDBTitle: 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;
28	c3nrwA	Alignment	not modelled	97.6	6	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 PDB header: hydrolase Chain: B: PDB Molecule: protelemorase;
29	c2v6eB	Alignment	not modelled	97.3	12	PDBTitle: protelomerase telk complexed with substrate dna PDB header: isomerase Chain: A: PDB Molecule: type i topoisomerase, putative;
30	c2f4gA	Alignment	not modelled	93.9	14	PDBTitle: crystal structure of deinococcus radiodurans topoisomerase ib Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
31	d1a0pa1	Alignment	not modelled	93.7	9	PDB header: transcription/dna Chain: A: PDB Molecule: pf14_0633 protein;
32	c3igmA	Alignment	not modelled	87.9	13	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 PDB header: isomerase/dna Chain: X: PDB Molecule: dna topoisomerase 1;
33	c2h7fx	Alignment	not modelled	82.6	16	PDBTitle: structure of variola topoisomerase covalently bound to dna Fold: DNA-binding domain Superfamily: DNA-binding domain Family: GCC-box binding domain
34	d1gcca	Alignment	not modelled	75.9	18	Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
35	d1f44a1	Alignment	not modelled	71.0	13	PDB header: viral protein Chain: A: PDB Molecule: integrase;
36	c1kjkA	Alignment	not modelled	69.9	28	PDBTitle: solution structure of the lambda integrase amino-terminal2 domain Fold: DNA-binding domain Superfamily: DNA-binding domain Family: lambda integrase N-terminal domain
37	d1z1ba1	Alignment	not modelled	69.9	28	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
38	d1qu6a2	Alignment	not modelled	52.1	28	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
39	d1x48a1	Alignment	not modelled	48.1	19	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
40	d1a41a	Alignment	not modelled	45.9	14	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
41	d1q08a	Alignment	not modelled	33.3	17	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
42	d1r8da	Alignment	not modelled	28.6	18	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
43	c3d6zA	Alignment	not modelled	28.4	2	PDB header: transcription regulator/dna Chain: A: PDB Molecule: multidrug-efflux transporter 1 regulator;
44	d2gf5a1	Alignment	not modelled	27.1	13	PDBTitle: crystal structure of r275e mutant of bmrr bound to dna and rhodamine Fold: DEATH domain Superfamily: DEATH domain Family: DEATH domain, DD
45	c2khxA	Alignment	not modelled	24.8	23	PDB header: gene regulation,nuclear protein Chain: A: PDB Molecule: ribonuclease 3;
46	d1r8ea1	Alignment	not modelled	24.0	2	PDBTitle: drosha double-stranded rna binding motif Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
47	d1qu6a1	Alignment	not modelled	22.9	24	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
48	d1x49a1	Alignment	not modelled	20.7	26	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
49	d1luxca	Alignment	not modelled	18.7	10	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
50	d1x47a1	Alignment	not modelled	16.9	20	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
51	c3qaoA	Alignment	not modelled	16.9	13	PDB header: transcription regulator Chain: A: PDB Molecule: merr-like transcriptional regulator;
52	c3hh0C	Alignment	not modelled	16.7	11	PDBTitle: the crystal structure of the n-terminal domain of a merr-like2 transcriptional regulator from listeria monocytogenes egd-e PDB header: transcription regulator Chain: C: PDB Molecule: transcriptional regulator, merr family;
						PDBTitle: crystal structure of a transcriptional regulator, merr family2 from bacillus cereus PDB header: gene regulation

53	c3adjA_	Alignment	not modelled	16.5	14	Chain: A; PDB Molecule: f21m12.9 protein; PDBTitle: structure of arabidopsis hyl1 and its molecular implications for mirna2 processing
54	d1o0wa2	Alignment	not modelled	16.0	22	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
55	c2zhbA_	Alignment	not modelled	15.6	16	PDB header: transcription Chain: A; PDB Molecule: redox-sensitive transcriptional activator soxr; PDBTitle: crystal structure of soxr
56	c3adiC_	Alignment	not modelled	15.3	18	PDB header: gene regulation/rna Chain: C; PDB Molecule: f21m12.9 protein; PDBTitle: structure of arabidopsis hyl1 and its molecular implications for mirna2 processing
57	c2l8nA_	Alignment	not modelled	14.3	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
58	c2yt4A_	Alignment	not modelled	13.2	20	PDB header: rna binding protein Chain: A; PDB Molecule: protein dgcr8; PDBTitle: crystal structure of human dgcr8 core
59	c2vz4A_	Alignment	not modelled	12.9	19	PDB header: transcription Chain: A; PDB Molecule: hth-type transcriptional activator tipa; PDBTitle: the n-terminal domain of merr-like protein tipal bound to2 promoter dna
60	d2auwa1	Alignment	not modelled	12.2	13	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: NE0471 C-terminal domain-like
61	d1rka1	Alignment	not modelled	11.8	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
62	d1uxda_	Alignment	not modelled	11.6	4	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
63	d1fada_	Alignment	not modelled	10.7	9	Fold: DEATH domain Superfamily: DEATH domain Family: DEATH domain, DD
64	c3ga7A_	Alignment	not modelled	10.5	12	PDB header: hydrolase Chain: A; PDB Molecule: acetyl esterase; PDBTitle: 1.55 angstrom crystal structure of an acetyl esterase from salmonella2 typhimurium
65	d2b7va1	Alignment	not modelled	10.5	22	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
66	d1lcda_	Alignment	not modelled	9.6	4	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
67	c2gf5A_	Alignment	not modelled	9.4	10	PDB header: apoptosis Chain: A; PDB Molecule: fadd protein; PDBTitle: structure of intact fadd (mort1)
68	c2x0lB_	Alignment	not modelled	8.8	13	PDB header: transcription Chain: B; PDB Molecule: rest corepressor 1; PDBTitle: crystal structure of a neuro-specific splicing variant of2 human histone lysine demethylase lsd1.
69	c2v1dB_	Alignment	not modelled	8.8	13	PDB header: oxidoreductase/repressor Chain: B; PDB Molecule: rest corepressor 1; PDBTitle: structural basis of lsd1-corest selectivity in histone h32 recognition
70	c2iw5B_	Alignment	not modelled	8.8	13	PDB header: oxi doreductase/transcription regulator Chain: B; PDB Molecule: rest corepressor 1; PDBTitle: structural basis for corest-dependent demethylation of2 nucleosomes by the human lsd1 histone demethylase
71	c2xajB_	Alignment	not modelled	8.8	13	PDB header: transcription Chain: B; PDB Molecule: rest corepressor 1; PDBTitle: crystal structure of lsd1-corest in complex with (-)-trans-2 2-phenylcyclopropyl-1-amine
72	c2lcvA_	Alignment	not modelled	8.4	4	PDB header: transcription regulator Chain: A; PDB Molecule: hth-type transcriptional repressor cytr; PDBTitle: structure of the cytidine repressor dna-binding domain; an alternate2 calculation
73	d2bjca1	Alignment	not modelled	8.3	4	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
74	d1qpza1	Alignment	not modelled	7.7	0	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
75	c3gpvA_	Alignment	not modelled	7.6	5	PDB header: transcription regulator Chain: A; PDB Molecule: transcriptional regulator, merr family; PDBTitle: crystal structure of a transcriptional regulator, merr2 family from bacillus thuringiensis
76	d2g7la1	Alignment	not modelled	7.5	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
77	d2b7ta1	Alignment	not modelled	7.5	16	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
78	d2iw5b1	Alignment	not modelled	7.4	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
79	d2csba1	Alignment	not modelled	7.4	17	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Topoisomerase V repeat domain

80	c3ol0C_	Alignment	not modelled	7.3	18	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
81	c1yd2A_	Alignment	not modelled	7.3	17	PDB header: dna binding protein Chain: A: PDB Molecule: uvrabc system protein c; PDBTitle: crystal structure of the giy-yig n-terminal endonuclease domain of2 uvrC from thermotoga maritima: point mutant y19f bound to the3 catalytic divalent cation
82	c2eqrA_	Alignment	not modelled	7.2	16	PDB header: transcription Chain: A: PDB Molecule: nuclear receptor corepressor 1; PDBTitle: solution structure of the first sant domain from human2 nuclear receptor corepressor 1
83	d1xc5a1	Alignment	not modelled	7.0	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
84	c2k4zA_	Alignment	not modelled	7.0	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dsrrr; PDBTitle: solution nmr structure of allochromatium vinosum dsrrr:2 northeast structural genomics consortium target op5
85	d1j6xa_	Alignment	not modelled	6.8	18	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
86	c2j8pA_	Alignment	not modelled	6.7	33	PDB header: nuclear protein Chain: A: PDB Molecule: cleavage stimulation factor 64 kda subunit; PDBTitle: nmr structure of c-terminal domain of human cstf-64
87	c1qu6A_	Alignment	not modelled	6.7	24	PDB header: transferase Chain: A: PDB Molecule: protein kinase pkr; PDBTitle: structure of the double-stranded rna-binding domain of the2 protein kinase pkr reveals the molecular basis of its3 dsrna-mediated activation
88	d1wi9a_	Alignment	not modelled	6.7	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PCI domain (PINT motif)
89	d1bb8a_	Alignment	not modelled	6.5	23	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: DNA-binding domain from tn916 integrase
90	c2l3jA_	Alignment	not modelled	6.4	22	PDB header: hydrolase/rna Chain: A: PDB Molecule: double-stranded rna-specific editase 1; PDBTitle: the solution structure of the adar2 dsrbm-rna complex reveals a2 sequence-specific read out of the minor groove
91	d1vmha_	Alignment	not modelled	6.4	17	Fold: YjbQ-like Superfamily: YjbQ-like Family: YjbQ-like
92	c2ae3A_	Alignment	not modelled	6.3	7	PDB header: hydrolase Chain: A: PDB Molecule: glutaryl 7-aminocephalosporanic acid acylase; PDBTitle: glutaryl 7-aminocephalosporanic acid acylase: mutational study of2 activation mechanism
93	d2hsga1	Alignment	not modelled	6.2	4	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
94	d1vz0a1	Alignment	not modelled	6.2	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: KorB DNA-binding domain-like Family: KorB DNA-binding domain-like
95	d1zk8a1	Alignment	not modelled	6.2	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain
96	c3lgbB_	Alignment	not modelled	6.1	10	PDB header: transferase Chain: B: PDB Molecule: dna primase large subunit; PDBTitle: crystal structure of the fe-s domain of the yeast dna primase
97	d1j6wa_	Alignment	not modelled	6.1	24	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
98	d1efaa1	Alignment	not modelled	6.1	4	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
99	d2g39a2	Alignment	not modelled	6.1	13	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like