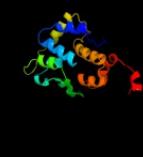


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P24218
Date	Thu Jan 5 11:41:20 GMT 2012
Unique Job ID	7360a498110597ed

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	c1ma7A			100.0	14	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
3	c2a3vA			100.0	17	PDB header: recombination Chain: A; PDB Molecule: site-specific recombinase intI4; PDBTitle: structural basis for broad dna-specificity in integron2 recombination
4	c1crxA			100.0	15	PDB header: replication/dna Chain: A; PDB Molecule: cre recombinase; PDBTitle: cre recombinase/dna complex reaction intermediate i
5	d1p7da			100.0	13	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
6	c3nkhB			99.9	18	PDB header: recombination Chain: B; PDB Molecule: integrase; PDBTitle: crystal structure of integrase from mrsa strain staphylococcus aureus
7	c1a0pA			99.9	18	PDB header: dna recombination Chain: A; PDB Molecule: site-specific recombinase xerd; PDBTitle: site-specific recombinase, xerd
8	d1aiha			99.9	30	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
9	d1f44a2			99.9	12	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
10	d1a0pa2			99.8	22	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
11	d1ae9a			99.8	14	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core

12	d5crxb2			99.6	14	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
13	c2khqA			99.1	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
14	c2kiwA			99.0	17	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).
15	c2oxoA			99.0	16	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
16	c3lysC			99.0	9	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
17	c2kobA			99.0	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
18	c2kd1A			98.9	13	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
19	c2kj8A			98.9	18	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
20	c2khvA			98.9	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.
21	c2kkpA		not modelled	98.9	15	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).
22	c2kj5A		not modelled	98.8	11	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
23	c2kkvA		not modelled	98.8	12	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
24	c2kj9A		not modelled	98.8	12	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
25	c2keyA		not modelled	98.7	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative phage integrase; PDBTitle: solution nmr structure of a domain from a putative phage integrase2 protein bf2284 from bacteroides fragilis, northeast structural3 genomics consortium target bfr257c
26	c3nrwA		not modelled	98.6	21	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
27	c2v6eB	Alignment	not modelled	97.1	11	PDB header: hydrolase Chain: B; PDB Molecule: protelomerase; PDBTitle: protelomerase telk complexed with substrate dna
28	d1a0pa1	Alignment	not modelled	96.7	14	Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
29	c3ju0A	Alignment	not modelled	96.7	20	PDB header: dna binding protein Chain: A; PDB Molecule: phage integrase; PDBTitle: structure of the arm-type binding domain of hai7 integrase
30	c3jtzA	Alignment	not modelled	96.0	22	PDB header: dna binding protein Chain: A; PDB Molecule: integrase; PDBTitle: structure of the arm-type binding domain of hpi integrase
31	d1f44a1	Alignment	not modelled	92.5	11	Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
32	c2f4qA	Alignment	not modelled	87.0	10	PDB header: isomerase Chain: A; PDB Molecule: type i topoisomerase, putative; PDBTitle: crystal structure of deinococcus radiodurans topoisomerase ib
33	d1z1ba1	Alignment	not modelled	86.2	36	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: lambda integrase N-terminal domain
34	c1kjka	Alignment	not modelled	84.8	36	PDB header: viral protein Chain: A; PDB Molecule: integrase; PDBTitle: solution structure of the lambda integrase amino-terminal2 domain
35	d1gcca	Alignment	not modelled	64.5	17	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: GCC-box binding domain
36	d3bida1	Alignment	not modelled	61.1	15	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
37	c2k8eA	Alignment	not modelled	56.6	16	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: upf0339 protein yego; PDBTitle: solution nmr structure of protein of unknown function yego from e.2 coli. ontario center for structural proteomics target ec0640_1_1233 northeast structural genomics consortium target et102.
38	c3igmA	Alignment	not modelled	52.6	17	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
39	c2k7ib	Alignment	not modelled	50.4	13	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: upf0339 protein atu0232; PDBTitle: solution nmr structure of protein atu0232 from agrobacterium tumefaciens. northeast structural genomics consortium (nesg) target3 att3. ontario center for structural proteomics target atc0223.
40	d2k7ia1	Alignment	not modelled	50.4	13	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
41	d2k8ea1	Alignment	not modelled	49.9	15	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
42	d2k49a2	Alignment	not modelled	49.0	17	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
43	c2k49A	Alignment	not modelled	46.6	11	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: upf0339 protein so_3888; PDBTitle: solution nmr structure of upf0339 protein so3888 from shewanella2 oneidensis. northeast structural genomics consortium target sor190
44	c2h7fx	Alignment	not modelled	43.1	16	PDB header: isomerase/dna Chain: X; PDB Molecule: dna topoisomerase 1; PDBTitle: structure of variola topoisomerase covalently bound to dna
45	d2k49a1	Alignment	not modelled	37.4	11	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
46	d1zj8a1	Alignment	not modelled	30.6	15	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SIR/NiR-like domains 1 and 3
47	d2k8ea2	Alignment	not modelled	29.8	16	Fold: YegP-like Superfamily: YegP-like Family: YegP-like
48	d2auwa1	Alignment	not modelled	21.6	23	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: NE0471 C-terminal domain-like
49	d1a41a	Alignment	not modelled	16.6	13	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
50	d1aopa2	Alignment	not modelled	16.1	10	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SIR/NiR-like domains 1 and 3
51	c2l2nA	Alignment	not modelled	14.9	15	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 dsrbds of protein hy1
						Fold: DEATH domain

52	d2gf5a1	Alignment	not modelled	14.3	8	Superfamily: DEATH domain Family: DEATH domain, DD
53	d1bb8a_	Alignment	not modelled	14.0	16	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: DNA-binding domain from tn916 integrase
54	d1whna_	Alignment	not modelled	13.2	12	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
55	c3adiC_	Alignment	not modelled	12.6	14	PDB header: gene regulation/rna Chain: C; PDB Molecule: f21m12.9 protein; PDBTitle: structure of arabidopsis hyl1 and its molecular implications for mirna2 processing
56	d2akja1	Alignment	not modelled	11.7	10	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SIR/NiR-like domains 1 and 3
57	c3frwF_	Alignment	not modelled	11.3	9	PDB header: structural genomics, unknown function Chain: F; PDB Molecule: putative trp repressor protein; PDBTitle: crystal structure of putative trpr protein from ruminococcus obuum
58	d1trra_	Alignment	not modelled	10.1	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Trp repressor, TrpR
59	d1l8qa1	Alignment	not modelled	9.8	7	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Chromosomal replication initiation factor DnaA C-terminal domain IV
60	c2auwB_	Alignment	not modelled	9.7	24	PDB header: unknown function Chain: B; PDB Molecule: hypothetical protein ne0471; PDBTitle: crystal structure of putative dna binding protein ne0471 from2 nitrosomonas europaea atcc 19718
61	d1xp8a2	Alignment	not modelled	8.1	18	Fold: Anti-LPS factor/recA domain Superfamily: RecA protein, C-terminal domain Family: RecA protein, C-terminal domain
62	c3sohB_	Alignment	not modelled	7.9	13	PDB header: motor protein Chain: B; PDB Molecule: flagellar motor switch protein flig; PDBTitle: architecture of the flagellar rotor
63	c2b9sA_	Alignment	not modelled	7.6	13	PDB header: isomerase/dna Chain: A; PDB Molecule: topoisomerase i-like protein; PDBTitle: crystal structure of heterodimeric l. donovani2 topoisomerase i-vanadate-dna complex
64	c3ol0C_	Alignment	not modelled	7.3	24	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
65	d1x57a1	Alignment	not modelled	7.1	13	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: EDF1-like
66	d1dwka1	Alignment	not modelled	6.6	9	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Cyanase N-terminal domain
67	d2aq0a1	Alignment	not modelled	6.5	13	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
68	c2gjihA_	Alignment	not modelled	6.2	17	PDB header: de novo protein Chain: A; PDB Molecule: designed protein; PDBTitle: nmr structure of cfr (c-terminal fragment of2 computationally designed novel-topology protein top7)
69	d1u94a2	Alignment	not modelled	6.1	27	Fold: Anti-LPS factor/recA domain Superfamily: RecA protein, C-terminal domain Family: RecA protein, C-terminal domain
70	d1luxca_	Alignment	not modelled	6.0	8	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
71	d1jhga_	Alignment	not modelled	5.8	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Trp repressor, TrpR
72	c2nogA_	Alignment	not modelled	5.7	13	PDB header: dna binding protein Chain: A; PDB Molecule: iswi protein; PDBTitle: sant domain structure of xenopus remodeling factor iswi
73	c2gf5A_	Alignment	not modelled	5.7	8	PDB header: apoptosis Chain: A; PDB Molecule: fadd protein; PDBTitle: structure of intact fadd (mort1)
74	c3nqhA_	Alignment	not modelled	5.5	11	PDB header: hydrolase Chain: A; PDB Molecule: glycosyl hydrolase; PDBTitle: crystal structure of a glycosyl hydrolase (bt_2959) from bacteroides2 thetaiotaomicron vpi-5482 at 2.11 a resolution
75	d1s7oa_	Alignment	not modelled	5.5	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Y1XM/p13-like
76	d1qu6a2	Alignment	not modelled	5.3	22	Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)
77	d1ubea2	Alignment	not modelled	5.3	17	Fold: Anti-LPS factor/recA domain Superfamily: RecA protein, C-terminal domain Family: RecA protein, C-terminal domain
78	d2d6ya1	Alignment	not modelled	5.1	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Tetracyclin repressor-like, N-terminal domain

79	d1mo6a2		Alignment	not modelled	5.1	25	Fold: Anti-LPS factor/recA domain Superfamily: RecA protein, C-terminal domain Family: RecA protein, C-terminal domain
80	d1z91a1		Alignment	not modelled	5.1	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MarR-like transcriptional regulators