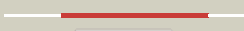
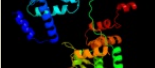
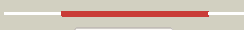
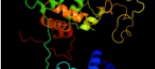
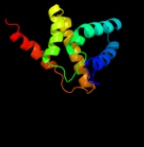
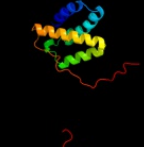
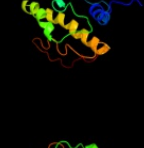
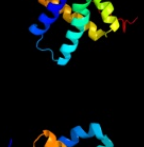
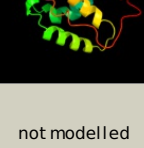


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P32053
Date	Thu Jan 5 11:49:00 GMT 2012
Unique Job ID	ae58351bac396b02

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		100.0	14	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
3	c1ma7A_	 Alignment		100.0	15	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	c1crx_	 Alignment		100.0	15	PDB header: replication/dna Chain: A: PDB Molecule: cre recombinase; PDBTitle: cre recombinase/dna complex reaction intermediate i
5	c2a3vA_	 Alignment		99.9	16	PDB header: recombination Chain: A: PDB Molecule: site-specific recombinase inti4; PDBTitle: structural basis for broad dna-specificity in integron2 recombination
6	c3nkhB_	 Alignment		99.9	18	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	d1aiha_	 Alignment		99.9	15	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
9	d1f44a2	 Alignment		99.8	13	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
10	c3ju0A_	 Alignment		99.8	44	PDB header: dna binding protein Chain: A: PDB Molecule: phage integrase; PDBTitle: structure of the arm-type binding domain of hai7 integrase
11	d1a0pa2	 Alignment		99.8	13	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core

12	d1ae9a_	Alignment		99.8	17	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
13	c3jtzA_	Alignment		99.8	43	PDB header: dna binding protein Chain: A: PDB Molecule: integrase; PDBTitle: structure of the arm-type binding domain of hpi integrase
14	d5crxb2	Alignment		99.6	16	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
15	c2kj8A_	Alignment		99.5	28	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	c2kiwA_	Alignment		99.4	23	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).
17	c2kj9A_	Alignment		99.4	28	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
18	c2kkvA_	Alignment		99.4	27	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
19	c2khqA_	Alignment		99.4	18	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
20	c2kd1A_	Alignment		99.3	17	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
21	c2kkpA_	Alignment	not modelled	99.3	17	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	c3lysC_	Alignment	not modelled	99.3	13	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
23	c2oxoA_	Alignment	not modelled	99.3	10	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
24	c2kj5A_	Alignment	not modelled	99.3	17	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
25	c2khvA_	Alignment	not modelled	99.3	21	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.
26	c2kobA_	Alignment	not modelled	99.2	15	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	99.0	10	PDBTitle: solution nmr structure of a domain from a putative phage integrase2 protein bf2284 from bacteroides fragilis, northeast structural3 genomics consortium target bfr257c
28	c3nrwA	Alignment	not modelled	98.7	10	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
29	c2v6eB	Alignment	not modelled	97.7	16	PDB header: hydrolase Chain: B: PDB Molecule: protelemorase; PDBTitle: protelomerase telk complexed with substrate dna
30	d1a0pa1	Alignment	not modelled	97.5	13	Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
31	c2f4qA	Alignment	not modelled	97.3	14	PDB header: isomerase Chain: A: PDB Molecule: type i topoisomerase, putative; PDBTitle: crystal structure of deinococcus radiodurans topoisomerase ib
32	c2h7fx	Alignment	not modelled	96.9	14	PDB header: isomerase/dna Chain: X: PDB Molecule: dna topoisomerase 1; PDBTitle: structure of variola topoisomerase covalently bound to dna
33	d1f44a1	Alignment	not modelled	95.9	10	Fold: SAM domain-like Superfamily: lambda integrase-like, N-terminal domain Family: lambda integrase-like, N-terminal domain
34	d1a41a	Alignment	not modelled	94.5	18	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
35	d1k4ta2	Alignment	not modelled	92.6	12	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
36	c2b9sA	Alignment	not modelled	92.5	15	PDB header: isomerase/dna Chain: A: PDB Molecule: topoisomerase i-like protein; PDBTitle: crystal structure of heterodimeric I. donovani2 topoisomerase i-vanadate-dna complex
37	d1rr8c1	Alignment	not modelled	91.0	12	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Eukaryotic DNA topoisomerase I, catalytic core
38	d1z1ba1	Alignment	not modelled	89.9	20	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: lambda integrase N-terminal domain
39	c1kjkA	Alignment	not modelled	89.1	20	PDB header: viral protein Chain: A: PDB Molecule: integrase; PDBTitle: solution structure of the lambda integrase amino-terminal2 domain
40	c1a31A	Alignment	not modelled	80.9	12	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
41	c1nh3A	Alignment	not modelled	79.0	12	PDB header: isomerase/dna Chain: A: PDB Molecule: dna topoisomerase i; PDBTitle: human topoisomerase i ara-c complex
42	d1gcca	Alignment	not modelled	75.6	15	Fold: DNA-binding domain Superfamily: DNA-binding domain Family: GCC-box binding domain
43	c3igmA	Alignment	not modelled	44.2	10	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
44	d1luxca	Alignment	not modelled	25.9	10	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
45	c2l8nA	Alignment	not modelled	16.2	13	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
46	d2iw5b1	Alignment	not modelled	16.0	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
47	d2csba1	Alignment	not modelled	16.0	26	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Topoisomerase V repeat domain
48	d2gf5a1	Alignment	not modelled	15.7	15	Fold: DEATH domain Superfamily: DEATH domain Family: DEATH domain, DD
49	d1luxda	Alignment	not modelled	15.3	10	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
50	c1v9nA	Alignment	not modelled	11.4	17	PDB header: oxidoreductase Chain: A: PDB Molecule: malate dehydrogenase; PDBTitle: structure of malate dehydrogenase from pyrococcus horikoshii ot3
51	c2nogA	Alignment	not modelled	10.9	14	PDB header: dna binding protein Chain: A: PDB Molecule: iswi protein; PDBTitle: sant domain structure of xenopus remodeling factor iswi
52	d1xc5a1	Alignment	not modelled	10.9	11	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
						Fold: L-sulfolactate dehydrogenase-like

53	d1xrha_	Alignment	not modelled	10.7	8	Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
54	d1p4ea2	Alignment	not modelled	9.8	14	Fold: DNA breaking-rejoining enzymes Superfamily: DNA breaking-rejoining enzymes Family: Lambda integrase-like, catalytic core
55	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
56	d1e6vc_	Alignment	not modelled	9.5	19	Fold: Ferredoxin-like Superfamily: Methyl-coenzyme M reductase subunits Family: Methyl-coenzyme M reductase gamma chain
57	c2g8yB_	Alignment	not modelled	9.1	10	PDB header: oxidoreductase Chain: B: PDB Molecule: malate/l-lactate dehydrogenases; PDBTitle: the structure of a putative malate/lactate dehydrogenase from e. coli.
58	d1qpza1	Alignment	not modelled	9.0	0	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
59	c2lcvA_	Alignment	not modelled	9.0	13	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
60	d1r8da_	Alignment	not modelled	8.9	17	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
61	d2bjca1	Alignment	not modelled	8.8	4	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
62	c2x0lB_	Alignment	not modelled	8.6	14	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.
63	c2iw5B_	Alignment	not modelled	8.6	14	PDB header: oxidoreductase/transcription regulator Chain: B: PDB Molecule: rest corepressor 1; PDBTitle: structural basis for corest-dependent demethylation of2 nucleosomes by the human lsd1 histone demethylase
64	c2v1dB_	Alignment	not modelled	8.6	14	PDB header: oxidoreductase/repressor Chain: B: PDB Molecule: rest corepressor 1; PDBTitle: structural basis of lsd1-corest selectivity in histone h32 recognition
65	c2xajB_	Alignment	not modelled	8.6	14	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
66	c2eqrA_	Alignment	not modelled	8.6	12	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
67	c1u24A_	Alignment	not modelled	8.3	10	PDB header: hydrolase Chain: A: PDB Molecule: myo-inositol hexaphosphate phosphohydrolase; PDBTitle: crystal structure of selenomonas ruminantium phytase
68	c1p4eB_	Alignment	not modelled	7.9	14	PDB header: dna binding protein/recombination/dna Chain: B: PDB Molecule: recombinase flp protein; PDBTitle: flpe w330f mutant-dna holliday junction complex
69	d2auwa1	Alignment	not modelled	7.9	6	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: NE0471 C-terminal domain-like
70	c3kmpA_	Alignment	not modelled	7.8	13	PDB header: transcription regulator/dna Chain: A: PDB Molecule: smad1-mh1; PDBTitle: crystal structure of smad1-mh1/dna complex
71	c3lgbB_	Alignment	not modelled	7.5	15	PDB header: transferase Chain: B: PDB Molecule: dna primase large subunit; PDBTitle: crystal structure of the fe-s domain of the yeast dna primase
72	c3d6zA_	Alignment	not modelled	7.5	7	PDB header: transcription regulator/dna Chain: A: PDB Molecule: multi drug-efflux transporter 1 regulator; PDBTitle: crystal structure of r275e mutant of bmrr bound to dna and rhodamine
73	c2daeA_	Alignment	not modelled	7.5	35	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: kiaa0733 protein; PDBTitle: solution structure of the n-terminal cue domain in the2 human mitogen-activated protein kinase kinase kinase 73 interacting protein 2 (map3k7ip2)
74	c3cuqA_	Alignment	not modelled	7.4	16	PDB header: protein transport Chain: A: PDB Molecule: vacuolar-sorting protein snf8; PDBTitle: integrated structural and functional model of the human escrt-ii2 complex
75	d1hbnc_	Alignment	not modelled	7.4	13	Fold: Ferredoxin-like Superfamily: Methyl-coenzyme M reductase subunits Family: Methyl-coenzyme M reductase gamma chain
76	d2hsqa1	Alignment	not modelled	7.3	4	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
77	c1wtjB_	Alignment	not modelled	7.2	10	PDB header: oxidoreductase Chain: B: PDB Molecule: ureidoglycolate dehydrogenase; PDBTitle: crystal structure of delta1-piperidine-2-carboxylate2 reductase from pseudomonas syringae pvar.tomato
78	d1nxua_	Alignment	not modelled	7.1	11	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
79	c2v4xA_	Alignment	not modelled	7.0	16	PDB header: viral protein Chain: A: PDB Molecule: capsid protein p27; PDBTitle: crystal structure of jaagsiekte sheep retrovirus capsid n-

					2 terminal domain
80	d1jhfa1	Alignment	not modelled	7.0	21 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: LexA repressor, N-terminal DNA-binding domain
81	c3sqgF_	Alignment	not modelled	6.8	31 PDB header: transferase Chain: F: PDB Molecule: methyl-coenzyme m reductase, gamma subunit; PDBTitle: crystal structure of a methyl-coenzyme m reductase purified from black2 sea mats
82	c3i0pA_	Alignment	not modelled	6.6	11 PDB header: oxidoreductase Chain: A: PDB Molecule: malate dehydrogenase; PDBTitle: crystal structure of malate dehydrogenase from entamoeba histolytica
83	c2kscA_	Alignment	not modelled	6.6	17 PDB header: unknown function Chain: A: PDB Molecule: cyanoglobin; PDBTitle: solution structure of synechococcus sp. pcc 7002 hemoglobin
84	c4a69C_	Alignment	not modelled	6.5	13 PDB header: transcription Chain: C: PDB Molecule: nuclear receptor corepressor 2; PDBTitle: structure of hdac3 bound to corepressor and inositol tetraphosphate
85	d1u5ta1	Alignment	not modelled	6.5	25 Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
86	d1j98a_	Alignment	not modelled	6.5	17 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
87	d1e6yc_	Alignment	not modelled	6.4	19 Fold: Ferredoxin-like Superfamily: Methyl-coenzyme M reductase subunits Family: Methyl-coenzyme M reductase gamma chain
88	d1efaa1	Alignment	not modelled	6.4	4 Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
89	c3ol0C_	Alignment	not modelled	6.4	31 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
90	c3n3fB_	Alignment	not modelled	6.3	10 PDB header: protein binding Chain: B: PDB Molecule: collagen alpha-1(xv) chain; PDBTitle: crystal structure of the human collagen xv trimerization domain: a2 potent trimerizing unit common to multiplexin collagens
91	c1vbiA_	Alignment	not modelled	6.3	13 PDB header: oxidoreductase Chain: A: PDB Molecule: type 2 malate/lactate dehydrogenase; PDBTitle: crystal structure of type 2 malate/lactate dehydrogenase from thermus2 thermophilus hb8
92	c3aq8A_	Alignment	not modelled	6.3	19 PDB header: oxygen binding Chain: A: PDB Molecule: group 1 truncated hemoglobin; PDBTitle: crystal structure of truncated hemoglobin from tetrahymena pyriformis, 2 q46e mutant, fe(iii) form
93	d1r8ea1	Alignment	not modelled	6.2	6 Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: DNA-binding N-terminal domain of transcription activators
94	d1j6xa_	Alignment	not modelled	5.9	20 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
95	d2crga1	Alignment	not modelled	5.8	18 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
96	d1vmha_	Alignment	not modelled	5.7	15 Fold: YjbQ-like Superfamily: YjbQ-like Family: YjbQ-like
97	c1or7A_	Alignment	not modelled	5.6	9 PDB header: transcription Chain: A: PDB Molecule: rna polymerase sigma-e factor; PDBTitle: crystal structure of escherichia coli sigmae with the cytoplasmic2 domain of its anti-sigma rsea
98	c3qaoA_	Alignment	not modelled	5.6	11 PDB header: transcription regulator Chain: A: PDB Molecule: merr-like transcriptional regulator; PDBTitle: the crystal structure of the n-terminal domain of a merr-like2 transcriptional regulator from listeria monocytogenes egd-e
99	d1qu6a2	Alignment	not modelled	5.6	13 Fold: dsRBD-like Superfamily: dsRNA-binding domain-like Family: Double-stranded RNA-binding domain (dsRBD)