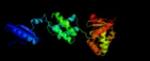
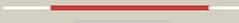
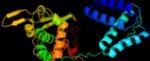
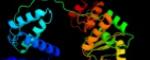
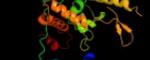
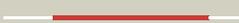
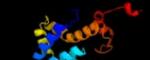
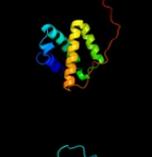
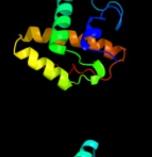
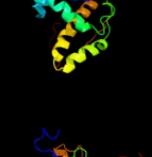
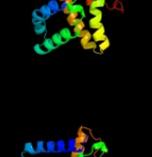
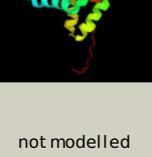


# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P75969
Date	Thu Jan 5 12:16:36 GMT 2012
Unique Job ID	7f2cf0187faa8c67

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">c1z1bA_</a>	 Alignment		100.0	33	<b>PDB header:</b> dna binding protein/dna <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> crystal structure of a lambda integrase dimer bound to a2 coc' core site
2	<a href="#">d1p7da_</a>	 Alignment		100.0	36	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Lambda integrase-like, catalytic core
3	<a href="#">c1ma7A_</a>	 Alignment		100.0	12	<b>PDB header:</b> hydrolase, ligase/dna <b>Chain:</b> A: <b>PDB Molecule:</b> cre recombinase; <b>PDBTitle:</b> crystal structure of cre site-specific recombinase2 complexed with a mutant dna substrate, loxp-a8/t27
4	<a href="#">c1crxA_</a>	 Alignment		100.0	11	<b>PDB header:</b> replication/dna <b>Chain:</b> A: <b>PDB Molecule:</b> cre recombinase; <b>PDBTitle:</b> cre recombinase/dna complex reaction intermediate i
5	<a href="#">c2a3vA_</a>	 Alignment		100.0	17	<b>PDB header:</b> recombination <b>Chain:</b> A: <b>PDB Molecule:</b> site-specific recombinase int4; <b>PDBTitle:</b> structural basis for broad dna-specificity in integron2 recombination
6	<a href="#">c3nkhB_</a>	 Alignment		100.0	17	<b>PDB header:</b> recombination <b>Chain:</b> B: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> crystal structure of integrase from mrsa strain staphylococcus aureus
7	<a href="#">c1a0pA_</a>	 Alignment		100.0	16	<b>PDB header:</b> dna recombination <b>Chain:</b> A: <b>PDB Molecule:</b> site-specific recombinase xerd; <b>PDBTitle:</b> site-specific recombinase, xerd
8	<a href="#">d1ae9a_</a>	 Alignment		99.9	36	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Lambda integrase-like, catalytic core
9	<a href="#">d1aiha_</a>	 Alignment		99.9	17	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Lambda integrase-like, catalytic core
10	<a href="#">d1f44a2</a>	 Alignment		99.9	13	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Lambda integrase-like, catalytic core
11	<a href="#">d1a0pa2</a>	 Alignment		99.9	17	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Lambda integrase-like, catalytic core

12	<a href="#">d5crxb2</a>	Alignment		99.8	16	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Lambda integrase-like, catalytic core
13	<a href="#">c2khqA</a>	Alignment		99.1	14	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> solution nmr structure of a phage integrase ssp19472 fragment 59-159 from staphylococcus saprophyticus,3 northeast structural genomics consortium target syr103b
14	<a href="#">c2oxoA</a>	Alignment		99.1	28	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> crystallization and structure determination of the core-2 binding domain of bacteriophage lambda integrase
15	<a href="#">c2kiwA</a>	Alignment		99.0	13	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> int protein; <b>PDBTitle:</b> 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	<a href="#">c3lysC</a>	Alignment		99.0	13	<b>PDB header:</b> recombination <b>Chain:</b> C: <b>PDB Molecule:</b> prophage pi2 protein 01, integrase; <b>PDBTitle:</b> 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	<a href="#">c2kj8A</a>	Alignment		98.8	15	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> putative prophage cps-53 integrase; <b>PDBTitle:</b> nmr structure of fragment 87-196 from the putative phage2 integrase ints of e. coli: northeast structural genomics3 consortium target er652a, psi-2
18	<a href="#">c2kkvA</a>	Alignment		98.8	12	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> solution nmr structure of an integrase domain from protein2 spa4288 from salmonella enterica, northeast structural3 genomics consortium target slr105h
19	<a href="#">c2kj9A</a>	Alignment		98.8	11	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> nmr structure of intb phage-integrase-like protein fragment2 90-199 from erwinia carotova subsp. atroseptica: northeast3 structural genomics consortium target ewr217e
20	<a href="#">c2kobA</a>	Alignment		98.7	9	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> solution nmr structure of clolep_01837 (fragment 61-160)2 from clostridium leptum. northeast structural genomics3 consortium target qlr8a
21	<a href="#">c2kd1A</a>	Alignment	not modelled	98.6	5	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> dna integrati/recombination/invertion protein; <b>PDBTitle:</b> solution nmr structure of the integrase-like domain from2 bacillus cereus ordered locus bc_1272. northeast3 structural genomics consortium target bcr268f
22	<a href="#">c2kkpA</a>	Alignment	not modelled	98.6	16	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> phage integrase; <b>PDBTitle:</b> 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).
23	<a href="#">c2khvA</a>	Alignment	not modelled	98.6	16	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> phage integrase; <b>PDBTitle:</b> solution nmr structure of protein nmul_a0922 from2 nitrosospira multiformis. northeast structural genomics3 consortium target nmr38b.
24	<a href="#">c2kj5A</a>	Alignment	not modelled	98.5	15	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> phage integrase; <b>PDBTitle:</b> 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	<a href="#">c2keyA</a>	Alignment	not modelled	98.4	10	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> putative phage integrase; <b>PDBTitle:</b> solution nmr structure of a domain from a putative phage integrase2 protein bf2284 from bacteroides fragilis, northeast structural3 genomics consortium target bfr257c
26	<a href="#">c2v6eB</a>	Alignment	not modelled	98.2	18	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> protelemorase; <b>PDBTitle:</b> protelomerase telk complexed with substrate dna
						<b>Fold:</b> DNA-binding domain

27	<a href="#">d1z1ba1</a>	Alignment	not modelled	98.1	41	<b>Superfamily:</b> DNA-binding domain <b>Family:</b> lambda integrase N-terminal domain
28	<a href="#">c3nrwA</a>	Alignment	not modelled	98.1	12	<b>PDB header:</b> recombination <b>Chain:</b> A: <b>PDB Molecule:</b> phage integrase/site-specific recombinase; <b>PDBTitle:</b> 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	<a href="#">c1kjkA</a>	Alignment	not modelled	98.1	41	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> solution structure of the lambda integrase amino-terminal2 domain
30	<a href="#">c3ju0A</a>	Alignment	not modelled	97.9	17	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> phage integrase; <b>PDBTitle:</b> structure of the arm-type binding domain of hai7 integrase
31	<a href="#">c3jtzA</a>	Alignment	not modelled	97.5	18	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> integrase; <b>PDBTitle:</b> structure of the arm-type binding domain of hpi integrase
32	<a href="#">d1a0pa1</a>	Alignment	not modelled	96.9	14	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> lambda integrase-like, N-terminal domain <b>Family:</b> lambda integrase-like, N-terminal domain
33	<a href="#">d1f44a1</a>	Alignment	not modelled	95.0	12	<b>Fold:</b> SAM domain-like <b>Superfamily:</b> lambda integrase-like, N-terminal domain <b>Family:</b> lambda integrase-like, N-terminal domain
34	<a href="#">c2b9sA</a>	Alignment	not modelled	77.9	16	<b>PDB header:</b> isomerase/dna <b>Chain:</b> A: <b>PDB Molecule:</b> topoisomerase i-like protein; <b>PDBTitle:</b> crystal structure of heterodimeric I. donovani2 topoisomerase i-vanadate-dna complex
35	<a href="#">c1a31A</a>	Alignment	not modelled	77.2	16	<b>PDB header:</b> isomerase/dna <b>Chain:</b> A: <b>PDB Molecule:</b> protein (topoisomerase i); <b>PDBTitle:</b> human reconstituted dna topoisomerase i in covalent complex2 with a 22 base pair dna duplex
36	<a href="#">d1p4ea2</a>	Alignment	not modelled	74.6	17	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Lambda integrase-like, catalytic core
37	<a href="#">d1k4ta2</a>	Alignment	not modelled	74.2	14	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Eukaryotic DNA topoisomerase I, catalytic core
38	<a href="#">c1p4eB</a>	Alignment	not modelled	72.8	17	<b>PDB header:</b> dna binding protein/recombination/dna <b>Chain:</b> B: <b>PDB Molecule:</b> recombinase flp protein; <b>PDBTitle:</b> flpe w330f mutant-dna holliday junction complex
39	<a href="#">d1rr8c1</a>	Alignment	not modelled	69.9	14	<b>Fold:</b> DNA breaking-rejoining enzymes <b>Superfamily:</b> DNA breaking-rejoining enzymes <b>Family:</b> Eukaryotic DNA topoisomerase I, catalytic core
40	<a href="#">c2f4qA</a>	Alignment	not modelled	47.3	21	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> type i topoisomerase, putative; <b>PDBTitle:</b> crystal structure of deinococcus radiodurans topoisomerase ib
41	<a href="#">c1nh3A</a>	Alignment	not modelled	35.5	16	<b>PDB header:</b> isomerase/dna <b>Chain:</b> A: <b>PDB Molecule:</b> dna topoisomerase i; <b>PDBTitle:</b> human topoisomerase i ara-c complex
42	<a href="#">c2h7fx</a>	Alignment	not modelled	28.3	15	<b>PDB header:</b> isomerase/dna <b>Chain:</b> X: <b>PDB Molecule:</b> dna topoisomerase 1; <b>PDBTitle:</b> structure of variola topoisomerase covalently bound to dna
43	<a href="#">c2k49A</a>	Alignment	not modelled	14.5	14	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> upf0339 protein so_3888; <b>PDBTitle:</b> solution nmr structure of upf0339 protein so3888 from shewanella2 oneidensis. northeast structural genomics consortium target sor190
44	<a href="#">d2csba5</a>	Alignment	not modelled	14.4	27	<b>Fold:</b> Topoisomerase V catalytic domain-like <b>Superfamily:</b> Topoisomerase V catalytic domain-like <b>Family:</b> Topoisomerase V catalytic domain-like
45	<a href="#">c3m6zA</a>	Alignment	not modelled	12.0	27	<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> topoisomerase v; <b>PDBTitle:</b> crystal structure of an n-terminal 44 kda fragment of topoisomerase v2 in the presence of guanidium hydrochloride
46	<a href="#">c3igmA</a>	Alignment	not modelled	11.4	6	<b>PDB header:</b> transcription/dna <b>Chain:</b> A: <b>PDB Molecule:</b> pf14_0633 protein; <b>PDBTitle:</b> 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
47	<a href="#">d1tc3c</a>	Alignment	not modelled	10.1	20	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Recombinase DNA-binding domain
48	<a href="#">c2k8eA</a>	Alignment	not modelled	10.0	12	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> upf0339 protein yegp; <b>PDBTitle:</b> solution nmr structure of protein of unknown function yegp from e.2 coli. ontario center for structural proteomics target ec0640_1_1233 northeast structural genomics consortium target et102.
49	<a href="#">c2csdB</a>	Alignment	not modelled	10.0	27	<b>PDB header:</b> isomerase <b>Chain:</b> B: <b>PDB Molecule:</b> topoisomerase v; <b>PDBTitle:</b> crystal structure of topoisomerase v (61 kda fragment)
50	<a href="#">d2k49a2</a>	Alignment	not modelled	7.8	11	<b>Fold:</b> YegP-like <b>Superfamily:</b> YegP-like <b>Family:</b> YegP-like
51	<a href="#">d2k8ea1</a>	Alignment	not modelled	7.5	11	<b>Fold:</b> YegP-like <b>Superfamily:</b> YegP-like <b>Family:</b> YegP-like
						<b>PDB header:</b> hormone

52	<a href="#">c2rrhA_</a>	Alignment	not modelled	7.4	30	<b>Chain:</b> A: <b>PDB Molecule:</b> vip peptides; <b>PDBTitle:</b> nmr structure of vasoactive intestinal peptide in methanol
53	<a href="#">d1o66a_</a>	Alignment	not modelled	7.1	23	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Phosphoenolpyruvate/pyruvate domain <b>Family:</b> Ketopantoate hydroxymethyltransferase PanB
54	<a href="#">c2ka4B_</a>	Alignment	not modelled	6.4	33	<b>PDB header:</b> transcription regulator <b>Chain:</b> B: <b>PDB Molecule:</b> signal transducer and activator of transcription <b>PDBTitle:</b> nmr structure of the cbp-taz1/stat2-tad complex
55	<a href="#">c2d2pA_</a>	Alignment	not modelled	6.4	30	<b>PDB header:</b> hormone/growth factor <b>Chain:</b> A: <b>PDB Molecule:</b> pituitary adenylate cyclase activating peptide <b>PDBTitle:</b> the solution structure of micelle-bound peptide
56	<a href="#">c1yd6A_</a>	Alignment	not modelled	6.2	16	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> uvrc; <b>PDBTitle:</b> crystal structure of the giy-yig n-terminal endonuclease2 domain of uvrc from bacillus caldotenax
57	<a href="#">d2al3a1</a>	Alignment	not modelled	5.9	9	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> UBX domain
58	<a href="#">c2kvvA_</a>	Alignment	not modelled	5.8	17	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> putative excisionase; <b>PDBTitle:</b> solution nmr of putative excisionase from klebsiella pneumoniae,2 northeast structural genomics consortium target kpr49
59	<a href="#">d1ug2a_</a>	Alignment	not modelled	5.4	10	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> Homeodomain-like <b>Family:</b> Myb/SANT domain
60	<a href="#">d1j6xa_</a>	Alignment	not modelled	5.3	16	<b>Fold:</b> LuxS/MPP-like metallohydrolase <b>Superfamily:</b> LuxS/MPP-like metallohydrolase <b>Family:</b> Autoinducer-2 production protein LuxS
61	<a href="#">d2bgxa2</a>	Alignment	not modelled	5.2	8	<b>Fold:</b> N-acetylmuramoyl-L-alanine amidase-like <b>Superfamily:</b> N-acetylmuramoyl-L-alanine amidase-like <b>Family:</b> N-acetylmuramoyl-L-alanine amidase-like
62	<a href="#">d1d1da2</a>	Alignment	not modelled	5.1	18	<b>Fold:</b> Retrovirus capsid protein, N-terminal core domain <b>Superfamily:</b> Retrovirus capsid protein, N-terminal core domain <b>Family:</b> Retrovirus capsid protein, N-terminal core domain
63	<a href="#">c2kgfA_</a>	Alignment	not modelled	5.1	12	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> capsid protein p27; <b>PDBTitle:</b> n-terminal domain of capsid protein from the mason-pfizer2 monkey virus
64	<a href="#">d1j2oa2</a>	Alignment	not modelled	5.1	44	<b>Fold:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Superfamily:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Family:</b> LIM domain