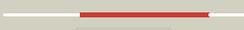
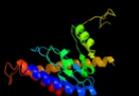
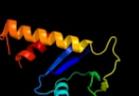
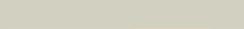
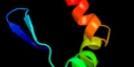
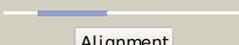
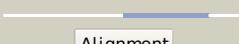
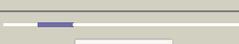
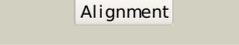


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	POCE53
Date	Thu Jan 5 11:30:21 GMT 2012
Unique Job ID	719595e33da3c748

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1musa_	 Alignment		98.3	13	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Transposase inhibitor (Tn5 transposase)
2	d1b7ea_	 Alignment		97.9	14	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Transposase inhibitor (Tn5 transposase)
3	d1cxqa_	 Alignment		76.7	22	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
4	d1asua_	 Alignment		75.9	20	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
5	c3nf9A_	 Alignment		53.5	14	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: integrase; PDBTitle: structural basis for a new mechanism of inhibition of hiv integrase2 identified by fragment screening and structure based design
6	d1c0ma2	 Alignment		49.1	15	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
7	c3hefB_	 Alignment		44.3	15	PDB header: viral protein Chain: B: PDB Molecule: gene 1 protein; PDBTitle: crystal structure of the bacteriophage sf6 terminase small2 subunit
8	d2htsa_	 Alignment		43.2	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Heat-shock transcription factor
9	d1hksa_	 Alignment		40.6	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Heat-shock transcription factor
10	d1a9xa1	 Alignment		39.8	14	Fold: Carbamoyl phosphate synthetase, large subunit connection domain Superfamily: Carbamoyl phosphate synthetase, large subunit connection domain Family: Carbamoyl phosphate synthetase, large subunit connection domain
11	c1c0mA_	 Alignment		34.5	18	PDB header: transferase Chain: A: PDB Molecule: protein (integrase); PDBTitle: crystal structure of rsv two-domain integrase

12	d1d5ra1	 Alignment		29.4	26	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
13	c2lduA_	 Alignment		28.7	21	PDB header: chaperone Chain: A: PDB Molecule: heat shock factor protein 1; PDBTitle: solution nmr structure of heat shock factor protein 1 dna binding2 domain from homo sapiens, northeast structural genomics consortium3 target hr3023c
14	c2e0yB_	 Alignment		28.2	20	PDB header: transferase Chain: B: PDB Molecule: gamma-glutamyltranspeptidase; PDBTitle: crystal structure of the samarium derivative of mature gamma-2 glutamyltranspeptidase from escherichia coli
15	c3pvpA_	 Alignment		24.2	14	PDB header: dna binding protein/dna Chain: A: PDB Molecule: chromosomal replication initiator protein dnaa; PDBTitle: structure of mycobacterium tuberculosis dnaa-dbd in complex with box22 dna
16	d1hyva_	 Alignment		23.1	16	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
17	c2nqoB_	 Alignment		22.2	15	PDB header: transferase Chain: B: PDB Molecule: gamma-glutamyltranspeptidase; PDBTitle: crystal structure of helicobacter pylori gamma-glutamyltranspeptidase
18	d1lexqa_	 Alignment		18.8	16	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
19	c3f9kV_	 Alignment		18.4	12	PDB header: viral protein, recombination Chain: V: PDB Molecule: integrase; PDBTitle: two domain fragment of hiv-2 integrase in complex with ledgf ibd
20	c3eplA_	 Alignment		15.3	10	PDB header: transferase/rna Chain: A: PDB Molecule: trna isopentenyltransferase; PDBTitle: crystallographic snapshots of eukaryotic2 dimethylallyltransferase acting on trna: insight into trna3 recognition and reaction mechanism
21	c2v36D_	 Alignment	not modelled	15.1	30	PDB header: transferase Chain: D: PDB Molecule: gamma-glutamyltranspeptidase small chain; PDBTitle: crystal structure of gamma-glutamyl transferase from2 bacillus subtilis
22	c2o8kA_	 Alignment	not modelled	15.0	27	PDB header: transcription/dna Chain: A: PDB Molecule: rna polymerase sigma factor rpon; PDBTitle: nmr structure of the sigma-54 rpon domain bound to the-242 promoter element
23	d1mnga2	 Alignment	not modelled	14.3	18	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
24	c1p7qL_	 Alignment	not modelled	13.5	5	PDB header: oxidoreductase Chain: L: PDB Molecule: superoxide dismutase; PDBTitle: crystal structure of superoxide dismutase from pyrobaculum2 aerophilum
25	d1bsma2	 Alignment	not modelled	13.4	11	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
26	d1slma1	 Alignment	not modelled	13.2	27	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
27	d1c6va_	 Alignment	not modelled	12.7	16	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
28	d1p7ga2	 Alignment	not modelled	12.6	5	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain

29	d1kkca2	Alignment	not modelled	12.5	5	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
30	d1b06a2	Alignment	not modelled	11.9	5	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
31	d1ma1a2	Alignment	not modelled	11.6	13	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
32	d1idsa2	Alignment	not modelled	11.1	13	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
33	c3g7pA	Alignment	not modelled	10.9	17	PDB header: unknown function Chain: A: PDB Molecule: nitrogen fixation protein; PDBTitle: crystal structure of a nifx-associated protein of unknown function2 (afe_1514) from acidithiobacillus ferrooxidans atcc at 2.00 a3 resolution
34	d2vo1a1	Alignment	not modelled	9.9	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
35	c3nj2B	Alignment	not modelled	9.8	17	PDB header: unknown function Chain: B: PDB Molecule: duf269-containing protein; PDBTitle: crystal structure of cce_0566 from the cyanobacterium cyanothece2 51142, a protein associated with nitrogen fixation from the duf2693 family
36	d1jr9a2	Alignment	not modelled	9.7	13	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
37	d1wb8a2	Alignment	not modelled	9.7	5	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
38	c3d3kD	Alignment	not modelled	9.2	12	PDB header: protein binding Chain: D: PDB Molecule: enhancer of mrna-decapping protein 3; PDBTitle: crystal structure of human edc3p
39	d2i3oa1	Alignment	not modelled	9.2	25	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Gamma-glutamyltranspeptidase-like
40	d1gv3a2	Alignment	not modelled	9.0	11	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
41	d2nyba2	Alignment	not modelled	8.9	8	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
42	c3ceiA	Alignment	not modelled	8.8	9	PDB header: oxidoreductase Chain: A: PDB Molecule: superoxide dismutase; PDBTitle: crystal structure of superoxide dismutase from helicobacter2 pylori
43	d2p4ka2	Alignment	not modelled	8.8	11	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
44	d2nlza1	Alignment	not modelled	8.7	20	Fold: Ntn hydrolase-like Superfamily: N-terminal nucleophile aminohydrolases (Ntn hydrolases) Family: Gamma-glutamyltranspeptidase-like
45	c3n0aA	Alignment	not modelled	8.6	29	PDB header: hydrolase Chain: A: PDB Molecule: tyrosine-protein phosphatase auxilin; PDBTitle: crystal structure of auxilin (40-400)
46	c1y67D	Alignment	not modelled	8.5	11	PDB header: oxidoreductase Chain: D: PDB Molecule: manganese superoxide dismutase; PDBTitle: crystal structure of manganese superoxide dismutase from2 deinococcus radiodurans
47	c2kvca	Alignment	not modelled	8.1	20	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: solution structure of the mycobacterium tuberculosis protein rv0543c,2 a member of the duf3349 superfamily. seattle structural genomics3 center for infectious disease target mytud.17112.a
48	d1y67a2	Alignment	not modelled	7.9	11	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
49	c3d3jA	Alignment	not modelled	7.4	12	PDB header: protein binding Chain: A: PDB Molecule: enhancer of mrna-decapping protein 3; PDBTitle: crystal structure of human edc3p
50	d1s1ma2	Alignment	not modelled	7.3	24	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
51	c3ga9S	Alignment	not modelled	7.2	36	PDB header: hydrolase Chain: S: PDB Molecule: capsule biosynthesis protein capd; PDBTitle: crystal structure of bacillus anthracis transpeptidase enzyme capd,2 crystal form ii
52	c1k6yB	Alignment	not modelled	7.1	15	PDB header: transferase Chain: B: PDB Molecule: integrase; PDBTitle: crystal structure of a two-domain fragment of hiv-1 integrase
53	d1j1va	Alignment	not modelled	6.7	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: Chromosomal replication initiation factor DnaA C-terminal domain IV

54	d1sfka_	Alignment	not modelled	6.4	24	Fold: Flavivirus capsid protein C Superfamily: Flavivirus capsid protein C Family: Flavivirus capsid protein C
55	d1vcoa2	Alignment	not modelled	6.3	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
56	c1cojA_	Alignment	not modelled	6.2	8	PDB header: oxidoreductase Chain: A: PDB Molecule: protein (superoxide dismutase); PDBTitle: fe-sod from aquifex pyrophilus, a hyperthermophilic bacterium
57	d1su3a1	Alignment	not modelled	6.1	28	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
58	d2fug11	Alignment	not modelled	5.9	19	Fold: Bromodomain-like Superfamily: Nqo1C-terminal domain-like Family: Nqo1C-terminal domain-like
59	d1b48a1	Alignment	not modelled	5.9	44	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
60	d1coja2	Alignment	not modelled	5.8	8	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
61	c1m6vE_	Alignment	not modelled	5.8	14	PDB header: ligase Chain: E: PDB Molecule: carbamoyl phosphate synthetase large chain; PDBTitle: crystal structure of the g359f (small subunit) point mutant of 2 carbamoyl phosphate synthetase
62	c1dt0A_	Alignment	not modelled	5.8	12	PDB header: oxidoreductase Chain: A: PDB Molecule: superoxide dismutase; PDBTitle: cloning, sequence, and crystallographic structure of 2 recombinant iron superoxide dismutase from pseudomonas3 ovalis
63	c2jg6A_	Alignment	not modelled	5.7	10	PDB header: hydrolase Chain: A: PDB Molecule: dna-3-methyladenine glycosidase; PDBTitle: crystal structure of a 3-methyladenine dna glycosylase i2 from staphylococcus aureus
64	c3kksB_	Alignment	not modelled	5.6	14	PDB header: dna binding protein Chain: B: PDB Molecule: integrase; PDBTitle: crystal structure of catalytic core domain of biv integrase in crystal2 form ii
65	c3eusB_	Alignment	not modelled	5.6	16	PDB header: dna binding protein Chain: B: PDB Molecule: dna-binding protein; PDBTitle: the crystal structure of the dna binding protein from silicibacter2 pomeroyi
66	c2vkpA_	Alignment	not modelled	5.5	12	PDB header: protein-binding Chain: A: PDB Molecule: btb/poz domain-containing protein 6; PDBTitle: crystal structure of btb domain from btbd6
67	d1uera2	Alignment	not modelled	5.2	15	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
68	d1ix9a2	Alignment	not modelled	5.1	13	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
69	d1v77a_	Alignment	not modelled	5.1	7	Fold: 7-stranded beta/alpha barrel Superfamily: PHP domain-like Family: RNase P subunit p30