


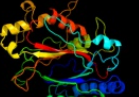
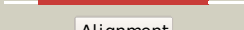

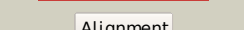




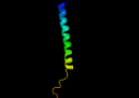
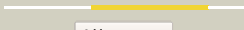

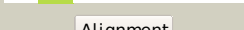
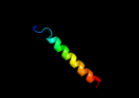
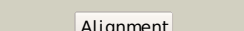
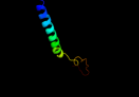
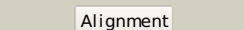










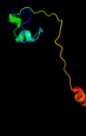



Phyre2









Email	I.a.kelley@imperial.ac.uk
Description	P31545
Date	Thu Jan 5 11:48:05 GMT 2012
Unique Job ID	ce39836f0622b3bc

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2wx6B	 Alignment		100.0	100	PDB header: oxidoreductase Chain: B: PDB Molecule: peroxidase ycdb; PDBTitle: x-ray crystallographic structure of e. coli apo-efeb
2	d2iiza1	 Alignment		100.0	24	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Dyp-type peroxidase-like
3	d2gvka1	 Alignment		100.0	20	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Dyp-type peroxidase-like
4	c3qnsA	 Alignment		100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: dyp peroxidase; PDBTitle: dypb from rhodococcus jostii rha1, crystal form 2
5	d2d3qa1	 Alignment		100.0	25	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Dyp-type peroxidase-like
6	c2e76D	 Alignment		89.5	11	PDB header: photosynthesis Chain: D: PDB Molecule: cytochrome b6-f complex iron-sulfur subunit; PDBTitle: crystal structure of the cytochrome b6f complex with tridecyl-2 stigmatellin (tds) from m.laminosus
7	c3nn4C	 Alignment		73.8	19	PDB header: oxidoreductase Chain: C: PDB Molecule: chlorite dismutase; PDBTitle: structure of chlorite dismutase from candidatus nitrospira defluvi2 r173k mutant
8	c1p84E	 Alignment		69.1	10	PDB header: oxidoreductase Chain: E: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur PDBTitle: hdbt inhibited yeast cytochrome bc1 complex
9	c2fynO	 Alignment		69.1	18	PDB header: oxidoreductase Chain: O: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur PDBTitle: crystal structure analysis of the double mutant rhodobacter2 sphaeroides bc1 complex
10	c2fyuE	 Alignment		68.7	12	PDB header: oxidoreductase Chain: E: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur subunit, PDBTitle: crystal structure of bovine heart mitochondrial bc1 with jg1442 inhibitor
11	c2pq4B	 Alignment		53.6	21	PDB header: chaperone/oxidoreductase Chain: B: PDB Molecule: periplasmic nitrate reductase precursor; PDBTitle: nmr solution structure of napd in complex with napa1-352 signal peptide

12	c2vxhF_	<div><div></div><div>Alignment</div></div>		47.4	17	PDB header: oxidoreductase Chain: F: PDB Molecule: chlorite dismutase; PDBTitle: the crystal structure of chlorite dismutase: a detox enzyme2 producing molecular oxygen
13	d1t0tv_	<div><div></div><div>Alignment</div></div>		36.3	21	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Chlorite dismutase-like
14	c2hpgB_	<div><div></div><div>Alignment</div></div>		33.4	13	PDB header: ligand binding protein Chain: B: PDB Molecule: abc transporter, periplasmic substrate-binding PDBTitle: the crystal structure of a thermophilic trap periplasmic2 binding protein
15	c3b0vD_	<div><div></div><div>Alignment</div></div>		33.3	17	PDB header: oxidoreductase/rna Chain: D: PDB Molecule: trna-dihydrouridine synthase; PDBTitle: trna-dihydrouridine synthase from thermus thermophilus in complex with2 trna
16	c2hzkB_	<div><div></div><div>Alignment</div></div>		25.0	14	PDB header: ligand binding, transport protein Chain: B: PDB Molecule: trap-t family sorbitol/mannitol transporter, periplasmic PDBTitle: crystal structures of a sodium-alpha-keto acid binding subunit from a2 trap transporter in its open form
17	c3b50A_	<div><div></div><div>Alignment</div></div>		24.3	16	PDB header: transport protein Chain: A: PDB Molecule: sialic acid-binding periplasmic protein siap; PDBTitle: structure of h. influenzae sialic acid binding protein2 bound to neu5ac.
18	c2pfyA_	<div><div></div><div>Alignment</div></div>		24.1	15	PDB header: transport protein Chain: A: PDB Molecule: putative exported protein; PDBTitle: crystal structure of dctp7, a bordetella pertussis2 extracytoplasmic solute receptor binding pyroglutamic acid
19	c3gyvC_	<div><div></div><div>Alignment</div></div>		18.1	18	PDB header: transport protein Chain: C: PDB Molecule: periplasmic substrate binding protein; PDBTitle: the ectoine binding protein of the teaabc trap transporter teaa in the2 apo-state
20	d1vdha_	<div><div></div><div>Alignment</div></div>		18.0	14	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Chlorite dismutase-like
21	c3fxbB_	<div><div></div><div>Alignment</div></div>	not modelled	17.3	16	PDB header: transport protein Chain: B: PDB Molecule: trap dicarboxylate transporter, dctp subunit; PDBTitle: crystal structure of the ectoine-binding protein ueha
22	d1vjja1	<div><div></div><div>Alignment</div></div>	not modelled	15.5	35	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Transglutaminase N-terminal domain
23	d1g0da1	<div><div></div><div>Alignment</div></div>	not modelled	15.3	26	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Transglutaminase N-terminal domain
24	c3njqB_	<div><div></div><div>Alignment</div></div>	not modelled	14.8	25	PDB header: viral protein/inhibitor Chain: B: PDB Molecule: orf 17; PDBTitle: crystal structure of kaposi's sarcoma-associated herpesvirus protease2 in complex with dimer disruptor
25	d1kfia4	<div><div></div><div>Alignment</div></div>	not modelled	14.8	33	Fold: TBP-like Superfamily: Phosphoglucumutase, C-terminal domain Family: Phosphoglucumutase, C-terminal domain
26	d2q3za1	<div><div></div><div>Alignment</div></div>	not modelled	14.6	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Transglutaminase N-terminal domain
27	d3pmga4	<div><div></div><div>Alignment</div></div>	not modelled	14.1	24	Fold: TBP-like Superfamily: Phosphoglucumutase, C-terminal domain Family: Phosphoglucumutase, C-terminal domain
28	c2r8kB_	<div><div></div><div>Alignment</div></div>	not modelled	12.9	6	PDB header: replication, transferase/dna Chain: B: PDB Molecule: dna polymerase eta; PDBTitle: structure of the eukaryotic dna polymerase eta in complex with 1,2-2 d(gpg)-cisplatin containing dna Fold: Cytochrome c

29	dinmla2	Alignment	not modelled	12.9	33	Superfamily: Cytochrome c Family: Di-heme cytochrome c peroxidase
30	dlex0a1	Alignment	not modelled	12.6	23	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Transglutaminase N-terminal domain
31	dljiha2	Alignment	not modelled	12.1	6	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
32	c2pfzA	Alignment	not modelled	11.9	11	PDB header: transport protein Chain: A: PDB Molecule: putative exported protein; PDBTitle: crystal structure of dctp6, a bordetella pertussis2 extracytoplasmic solute receptor binding pyroglutamic acid
33	d1uoua3	Alignment	not modelled	11.8	11	Fold: alpha/beta-Hammerhead Superfamily: Pyrimidine nucleoside phosphorylase C-terminal domain Family: Pyrimidine nucleoside phosphorylase C-terminal domain
34	cljihA	Alignment	not modelled	11.7	6	PDB header: translation Chain: A: PDB Molecule: dna polymerase eta; PDBTitle: yeast dna polymerase eta
35	d2pbka1	Alignment	not modelled	11.7	25	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
36	c3hq7A	Alignment	not modelled	11.6	23	PDB header: oxidoreductase Chain: A: PDB Molecule: cytochrome c551 peroxidase; PDBTitle: ccpa from g. sulfurreducens, g94k/k97q/r100i variant
37	c1yqmA	Alignment	not modelled	11.3	17	PDB header: hydrolase/dna Chain: A: PDB Molecule: n-glycosylase/dna lyase; PDBTitle: catalytically inactive human 8-oxoguanine glycosylase2 crosslinked to 7-deazaguanine containing dna
38	c2x29A	Alignment	not modelled	11.0	25	PDB header: cell adhesion Chain: A: PDB Molecule: tumor necrosis factor ligand superfamily member PDBTitle: crystal structure of human4-1bb ligand ectodomain
39	c2aq4A	Alignment	not modelled	10.8	23	PDB header: transferase Chain: A: PDB Molecule: dna repair protein rev1; PDBTitle: ternary complex of the catalytic core of rev1 with dna and dctp.
40	c2oh2B	Alignment	not modelled	10.5	9	PDB header: transferase/dna Chain: B: PDB Molecule: dna polymerase kappa; PDBTitle: ternary complex of human dna polymerase
41	d1tdja3	Alignment	not modelled	9.4	27	Fold: Ferredoxin-like Superfamily: ACT-like Family: Allosteric threonine deaminase C-terminal domain
42	d1na6a1	Alignment	not modelled	9.4	40	Fold: DNA-binding pseudobarrel domain Superfamily: DNA-binding pseudobarrel domain Family: Type II restriction endonuclease effector domain
43	c3eq1A	Alignment	not modelled	9.0	25	PDB header: transferase Chain: A: PDB Molecule: porphobilinogen deaminase; PDBTitle: the crystal structure of human porphobilinogen deaminase at2.8a resolution
44	d1at3a	Alignment	not modelled	8.4	19	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
45	d2i09a2	Alignment	not modelled	7.9	21	Fold: DeoB insert domain-like Superfamily: DeoB insert domain-like Family: DeoB insert domain-like
46	c3gqcB	Alignment	not modelled	7.8	9	PDB header: transferase/dna Chain: B: PDB Molecule: dna repair protein rev1; PDBTitle: structure of human rev1-dna-dntp ternary complex
47	c2p5xB	Alignment	not modelled	7.8	18	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: n-acetylserotonin o-methyltransferase-like protein; PDBTitle: crystal structure of maf domain of human n-acetylserotonin o-2 methyltransferase-like protein
48	c3ps9A	Alignment	not modelled	7.7	23	PDB header: transferase Chain: A: PDB Molecule: trna 5-methylaminomethyl-2-thiouridine biosynthesis PDBTitle: crystal structure of mnmc from e. coli
49	d1o6ea	Alignment	not modelled	7.2	16	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
50	c3mr2A	Alignment	not modelled	7.1	6	PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase eta; PDBTitle: human dna polymerase eta in complex with normal dna and incoming2 nucleotide (nrm)
51	c2vfyA	Alignment	not modelled	6.9	20	PDB header: hydrolase Chain: A: PDB Molecule: akap18 delta; PDBTitle: akap18 delta central domain
52	c1nmlA	Alignment	not modelled	6.9	19	PDB header: oxidoreductase Chain: A: PDB Molecule: di-haem cytochrome c peroxidase; PDBTitle: di-haemic cytochrome c peroxidase from pseudomonas nautica 617, form2 in (ph 4.0)
53	c2cluB	Alignment	not modelled	6.8	23	PDB header: oxidoreductase Chain: B: PDB Molecule: di-haem cytochrome c peroxidase; PDBTitle: crystal structure of the di-haem cytochrome c peroxidase2 from paracoccus pantotrophus - oxidised form
54	d1eb7a2	Alignment	not modelled	6.7	16	Fold: Cytochrome c Superfamily: Cytochrome c Family: Di-heme cytochrome c peroxidase
55	c3pt1A	Alignment	not modelled	6.7	11	PDB header: hydrolase Chain: A: PDB Molecule: upf0364 protein ymr027w; PDBTitle: structure of duf89 from saccharomyces cerevisiae co-crystallized with2 f6p.

56	c2e1aD_	 Alignment	not modelled	6.6	11	PDB header: transcription Chain: D: PDB Molecule: 75aa long hypothetical regulatory protein asnc; PDBTitle: crystal structure of ffrp-dm1
57	c1ko9A_	 Alignment	not modelled	5.8	16	PDB header: hydrolase Chain: A: PDB Molecule: 8-oxoguanine dna glycosylase; PDBTitle: native structure of the human 8-oxoguanine dna glycosylase2 hogg1
58	c2qdrA_	 Alignment	not modelled	5.7	12	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative dioxygenase (npun_f5605) from nostoc2 punctiforme pcc 73102 at 2.60 a resolution
59	c3dtzB_	 Alignment	not modelled	5.7	14	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative chlorite dismutase ta0507; PDBTitle: crystal structure of putative chlorite dismutase ta0507
60	c1cq0A_	 Alignment	not modelled	5.6	78	PDB header: de novo protein Chain: A: PDB Molecule: protein (new hypothalamic neuropeptide/orexin- PDBTitle: solution structure of a human hypocretin-2/orexin-2 b'solution structure of a human hypocretin-2/orexin-b '
61	d1iega_	 Alignment	not modelled	5.6	20	Fold: Herpes virus serine proteinase, assemblin Superfamily: Herpes virus serine proteinase, assemblin Family: Herpes virus serine proteinase, assemblin
62	d2cg4a2	 Alignment	not modelled	5.5	17	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Lrp/AsnC-like transcriptional regulator C-terminal domain
63	c1t94B_	 Alignment	not modelled	5.3	9	PDB header: replication Chain: B: PDB Molecule: polymerase (dna directed) kappa; PDBTitle: crystal structure of the catalytic core of human dna2 polymerase kappa