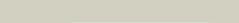
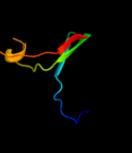


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P23830
Date	Wed Jan 25 15:20:43 GMT 2012
Unique Job ID	b8a9660c6f91851a

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3hsiC_	 Alignment		100.0	46	PDB header: transferase Chain: C: PDB Molecule: phosphatidylserine synthase; PDBTitle: crystal structure of phosphatidylserine synthase haemophilus2 influenzae rd kw20
2	c1v0sA_	 Alignment		100.0	16	PDB header: hydrolase Chain: A: PDB Molecule: phospholipase d; PDBTitle: uninhibited form of phospholipase d from streptomyces sp.2 strain pmf
3	d1v0wa1	 Alignment		99.9	14	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Phospholipase D
4	c1xdoB_	 Alignment		99.9	19	PDB header: transferase Chain: B: PDB Molecule: polyphosphate kinase; PDBTitle: crystal structure of escherichia coli polyphosphate kinase
5	d1xdpa3	 Alignment		99.9	18	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
6	d1byra_	 Alignment		99.9	15	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Nuclease
7	d1v0wa2	 Alignment		99.9	19	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Phospholipase D
8	c2o8rA_	 Alignment		99.6	18	PDB header: transferase Chain: A: PDB Molecule: polyphosphate kinase; PDBTitle: crystal structure of polyphosphate kinase from2 porphyromonas gingivalis
9	d2o8ra3	 Alignment		98.5	14	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
10	d1xdpa4	 Alignment		98.1	15	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
11	c1q32C_	 Alignment		97.9	14	PDB header: replication,transcription,hydrolase Chain: C: PDB Molecule: tyrosyl-dna phosphodiesterase; PDBTitle: crystal structure analysis of the yeast tyrosyl-dna2 phosphodiesterase

12	c3sq3C_	Alignment		97.7	14	PDB header: hydrolase Chain: C: PDB Molecule: tyrosyl-dna phosphodiesterase 1; PDBTitle: crystal structure analysis of the yeast tyrosyl-dna phosphodiesterase2 h182a mutant
13	d2o8ra4	Alignment		97.4	13	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Polyphosphate kinase C-terminal domain
14	c2c1A_	Alignment		97.0	13	PDB header: hydrolase Chain: A: PDB Molecule: restriction endonuclease; PDBTitle: structure of the bfiI restriction endonuclease
15	d1jy1a2	Alignment		95.8	30	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
16	c1nopB_	Alignment		95.6	35	PDB header: hydrolase/dna Chain: B: PDB Molecule: tyrosyl-dna phosphodiesterase 1; PDBTitle: crystal structure of human tyrosyl-dna phosphodiesterase2 (tdp1) in complex with vanadate, dna and a human3 topoisomerase i-derived peptide
17	d1q32a2	Alignment		94.1	30	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
18	d2f5tx2	Alignment		62.9	16	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: TrmB middle domain-like
19	d1qzqa1	Alignment		62.8	29	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
20	d1q32a1	Alignment		51.7	11	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
21	c2f5tX_	Alignment	not modelled	51.3	16	PDB header: transcription Chain: X: PDB Molecule: archaeal transcriptional regulator trmb; PDBTitle: crystal structure of the sugar binding domain of the archaeal2 transcriptional regulator trmb
22	d1jy1a1	Alignment	not modelled	38.2	14	Fold: Phospholipase D/nuclease Superfamily: Phospholipase D/nuclease Family: Tyrosyl-DNA phosphodiesterase TDP1
23	c2a5hC_	Alignment	not modelled	37.2	11	PDB header: isomerase Chain: C: PDB Molecule: l-lysine 2,3-aminomutase; PDBTitle: 2.1 angstrom x-ray crystal structure of lysine-2,3-aminomutase from2 clostridium subterminale sb4, with michaelis analog (l-alpha-lysine3 external aldimine form of pyridoxal-5'-phosphate).
24	d1vdda_	Alignment	not modelled	22.7	22	Fold: Recombination protein RecR Superfamily: Recombination protein RecR Family: Recombination protein RecR
25	c1vddC_	Alignment	not modelled	20.0	22	PDB header: recombination Chain: C: PDB Molecule: recombination protein recr; PDBTitle: crystal structure of recombinational repair protein recr
26	d1f0ya2	Alignment	not modelled	18.8	14	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
27	d1gz0a2	Alignment	not modelled	17.3	11	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: RNA 2'-O ribose methyltransferase substrate binding domain
28	c2x7mA_	Alignment	not modelled	17.3	18	PDB header: hydrolase Chain: A: PDB Molecule: archaemetzincin; PDBTitle: crystal structure of archaemetzincin (amza) from

						methanopyrus2 kandleri at 1.5 a resolution
29	d1f8ya_	Alignment	not modelled	16.8	6	Fold: Flavodoxin-like Superfamily: N-(deoxy)ribosyltransferase-like Family: N-deoxyribosyltransferase
30	c1t3gB_	Alignment	not modelled	16.7	8	PDB header: membrane protein Chain: B: PDB Molecule: x-linked interleukin-1 receptor accessory PDBTitle: crystal structure of the toll/interleukin-1 receptor (tir)2 domain of human il-1rapl
31	c3hu5B_	Alignment	not modelled	16.5	15	PDB header: hydrolase Chain: B: PDB Molecule: isochorismatase family protein; PDBTitle: crystal structure of isochorismatase family protein from desulfovibrio2 vulgaris subsp. vulgaris str. hildenborough
32	d2bdea1	Alignment	not modelled	16.0	24	Fold: HAD-like Superfamily: HAD-like Family: 5' nucleotidase-like
33	d1s2da_	Alignment	not modelled	16.0	14	Fold: Flavodoxin-like Superfamily: N-(deoxy)ribosyltransferase-like Family: N-deoxyribosyltransferase
34	d1e8ob_	Alignment	not modelled	15.8	11	Fold: Signal recognition particle alu RNA binding heterodimer, SRP9/14 Superfamily: Signal recognition particle alu RNA binding heterodimer, SRP9/14 Family: Signal recognition particle alu RNA binding heterodimer, SRP9/14
35	c1b9xC_	Alignment	not modelled	15.5	21	PDB header: signaling protein Chain: C: PDB Molecule: protein (phosducin); PDBTitle: structural analysis of phosducin and its phosphorylation-2 regulated interaction with transducin
36	c2l82A_	Alignment	not modelled	15.5	26	PDB header: de novo protein Chain: A: PDB Molecule: designed protein or32; PDBTitle: solution nmr structure of de novo designed protein, p-loop ntpase2 fold, northeast structural genomics consortium target or32
37	d1x9ga_	Alignment	not modelled	13.9	14	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
38	d1gz0f2	Alignment	not modelled	13.0	11	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: RNA 2'-O ribose methyltransferase substrate binding domain
39	d1914a2	Alignment	not modelled	11.5	12	Fold: Signal recognition particle alu RNA binding heterodimer, SRP9/14 Superfamily: Signal recognition particle alu RNA binding heterodimer, SRP9/14 Family: Signal recognition particle alu RNA binding heterodimer, SRP9/14
40	d1j5pa4	Alignment	not modelled	11.4	9	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
41	c1zrwA_	Alignment	not modelled	10.9	46	PDB header: antimicrobial protein, antibiotic Chain: A: PDB Molecule: spinigerin; PDBTitle: solution structure of spinigerin in h20/tfe 10%
42	c1zrvA_	Alignment	not modelled	10.9	46	PDB header: antimicrobial protein, antibiotic Chain: A: PDB Molecule: spinigerin; PDBTitle: solution structure of spinigerin in h20/tfe 50%
43	c2b34C_	Alignment	not modelled	10.4	16	PDB header: hydrolase Chain: C: PDB Molecule: mar1 ribonuclease; PDBTitle: structure of mar1 ribonuclease from caenorhabditis elegans
44	c2jcmA_	Alignment	not modelled	10.0	18	PDB header: hydrolase Chain: A: PDB Molecule: cytosolic purine 5'-nucleotidase; PDBTitle: crystal structure of human cytosolic 5'-nucleotidase ii in2 complex with beryllium trifluoride
45	c3gbcA_	Alignment	not modelled	9.9	17	PDB header: hydrolase Chain: A: PDB Molecule: pyrazinamidase/nicotinamidase pnca; PDBTitle: determination of the crystal structure of the pyrazinamidase from2 m.tuberculosis : a structure-function analysis for prediction3 resistance to pyrazinamide
46	c2r60A_	Alignment	not modelled	9.4	17	PDB header: transferase Chain: A: PDB Molecule: glycosyl transferase, group 1; PDBTitle: structure of apo sucrose phosphate synthase (sps) of2 halothermothrix orenii
47	c2jz2A_	Alignment	not modelled	9.4	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ssl0352 protein; PDBTitle: solution nmr structure of ssl0352 protein from synechocystis sp. pcc2 6803. northeast structural genomics consortium target sgr42
48	d1ldna1	Alignment	not modelled	9.3	9	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
49	c3l2iB_	Alignment	not modelled	9.3	8	PDB header: lyase Chain: B: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: 1.85 angstrom crystal structure of the 3-dehydroquinate dehydratase2 (arod) from salmonella typhimurium lt2.
50	c2kxeA_	Alignment	not modelled	9.2	29	PDB header: transferase Chain: A: PDB Molecule: dna polymerase ii small subunit; PDBTitle: n-terminal domain of the dp1 subunit of an archaeal d-family dna2 polymerase
51	c1g4wR_	Alignment	not modelled	8.9	11	PDB header: signaling protein Chain: R: PDB Molecule: protein tyrosine phosphatase sptp; PDBTitle: crystal structure of the salmonella tyrosine phosphatase2 and gtpase activating protein sptp
52	d1m6ia2	Alignment	not modelled	8.8	19	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains
						Fold: NAD(P)-binding Rossmann-fold domains

53	d1guza1	Alignment	not modelled	8.5	13	Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
54	c3ua4A	Alignment	not modelled	8.1	14	PDB header: transferase Chain: A: PDB Molecule: protein arginine n-methyltransferase 5; PDBTitle: crystal structure of protein arginine methyltransferase prmt5
55	c3dy0B	Alignment	not modelled	7.9	20	PDB header: blood clotting, hydrolase inhibitor Chain: B: PDB Molecule: c-terminus plasma serine protease inhibitor; PDBTitle: crystal structure of cleaved pci bound to heparin
56	c1xeaD	Alignment	not modelled	7.8	8	PDB header: oxidoreductase Chain: D: PDB Molecule: oxidoreductase, gfo/idh/moca family; PDBTitle: crystal structure of a gfo/idh/moca family oxidoreductase2 from vibrio cholerae
57	d1ojua1	Alignment	not modelled	7.7	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
58	d1im5a	Alignment	not modelled	7.5	11	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
59	c3gt0A	Alignment	not modelled	7.4	12	PDB header: oxidoreductase Chain: A: PDB Molecule: pyrroline-5-carboxylate reductase; PDBTitle: crystal structure of pyrroline 5-carboxylate reductase from bacillus2 cereus. northeast structural genomics consortium target bcr38b
60	c1lq8H	Alignment	not modelled	7.4	20	PDB header: blood clotting Chain: H: PDB Molecule: plasma serine protease inhibitor; PDBTitle: crystal structure of cleaved protein c inhibitor
61	d2g8la1	Alignment	not modelled	7.2	24	Fold: AF1104-like Superfamily: AF1104-like Family: AF1104-like
62	c3oqhB	Alignment	not modelled	7.0	16	PDB header: ligase Chain: B: PDB Molecule: putative uncharacterized protein yvmc; PDBTitle: crystal structure of b. licheniformis cdps yvmc-blic
63	d1czan3	Alignment	not modelled	6.9	22	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
64	d5ldha1	Alignment	not modelled	6.7	9	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
65	d1x94a	Alignment	not modelled	6.4	10	Fold: SIS domain Superfamily: SIS domain Family: mono-SIS domain
66	d1sjpa3	Alignment	not modelled	6.3	6	Fold: GroEL-intermediate domain like Superfamily: GroEL-intermediate domain like Family: GroEL-like chaperone, intermediate domain
67	d1obba1	Alignment	not modelled	6.3	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
68	d1llda1	Alignment	not modelled	6.3	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
69	d1gqna	Alignment	not modelled	6.3	6	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
70	c3qufB	Alignment	not modelled	6.3	14	PDB header: transport protein Chain: B: PDB Molecule: extracellular solute-binding protein, family 1; PDBTitle: the structure of a family 1 extracellular solute-binding protein from2 bifidobacterium longum subsp. infantis
71	d1ez4a1	Alignment	not modelled	6.2	14	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
72	d1u8xx1	Alignment	not modelled	6.2	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
73	d1up7a1	Alignment	not modelled	6.1	10	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
74	d2zdra2	Alignment	not modelled	6.1	13	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: NeuB-like
75	c1llcA	Alignment	not modelled	6.1	14	PDB header: oxidoreductase(choh(d)-nad(a)) Chain: A: PDB Molecule: l-lactate dehydrogenase; PDBTitle: structure determination of the allosteric l-lactate dehydrogenase from2 lactobacillus casei at 3.0 angstroms resolution
76	c2x0dA	Alignment	not modelled	6.1	23	PDB header: transferase Chain: A: PDB Molecule: wsaf; PDBTitle: apo structure of wsaf
77	d1jjcb4	Alignment	not modelled	6.1	13	Fold: Ferredoxin-like Superfamily: Anti codon-binding domain of PheRS Family: Anti codon-binding domain of PheRS
78	d1a0rp	Alignment	not modelled	6.1	21	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Phosducin
79	c2v6bB	Alignment	not modelled	5.7	7	PDB header: oxidoreductase Chain: B: PDB Molecule: l-lactate dehydrogenase; PDBTitle: crystal structure of lactate dehydrogenase from

						deinococcus2 radiodurans (apo form)
80	c2yvaB	Alignment	not modelled	5.7	7	PDB header: dna binding protein Chain: B: PDB Molecule: dnaa initiator-associating protein diaa; PDBTitle: crystal structure of escherichia coli diaa
81	c2qupA	Alignment	not modelled	5.7	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: bh1478 protein; PDBTitle: crystal structure of uncharacterized protein bh1478 from bacillus2 halodurans
82	c2krcA	Alignment	not modelled	5.6	17	PDB header: transcription Chain: A: PDB Molecule: dna-directed rna polymerase subunit delta; PDBTitle: solution structure of the n-terminal domain of bacillus2 subtilis delta subunit of rna polymerase
83	d4pgaa	Alignment	not modelled	5.6	12	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
84	c1a5zA	Alignment	not modelled	5.6	10	PDB header: oxidoreductase Chain: A: PDB Molecule: l-lactate dehydrogenase; PDBTitle: lactate dehydrogenase from thermotoga maritima (tml dh)
85	d1lca1	Alignment	not modelled	5.6	14	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
86	d1ldma1	Alignment	not modelled	5.5	12	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: LDH N-terminal domain-like
87	c3js3C	Alignment	not modelled	5.5	8	PDB header: lyase Chain: C: PDB Molecule: 3-dehydroquinone dehydratase; PDBTitle: crystal structure of type i 3-dehydroquinone dehydratase (arod) from2 clostridium difficile with covalent reaction intermediate
88	d2dx5a1	Alignment	not modelled	5.5	19	Fold: PH domain-like barrel Superfamily: PH domain-like Family: VPS36 N-terminal domain-like
89	c3bsmD	Alignment	not modelled	5.5	12	PDB header: lyase Chain: D: PDB Molecule: mandelate racemase/muconate lactonizing enzyme; PDBTitle: crystal structure of d-mannonate dehydratase from2 chromohalobacter salexigens
90	d1x92a	Alignment	not modelled	5.4	15	Fold: SIS domain Superfamily: SIS domain Family: mono-SIS domain
91	d2bisa1	Alignment	not modelled	5.4	15	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Glycosyl transferases group 1
92	c1914A	Alignment	not modelled	5.3	12	PDB header: alu domain Chain: A: PDB Molecule: signal recognition particle 9/14 fusion protein; PDBTitle: signal recognition particle alu rna binding heterodimer, srp9/14
93	d2p61a1	Alignment	not modelled	5.3	7	Fold: Four-helical up-and-down bundle Superfamily: TM1646-like Family: TM1646-like
94	c2pr7A	Alignment	not modelled	5.3	12	PDB header: hydrolase Chain: A: PDB Molecule: haloacid dehalogenase/epoxide hydrolase family; PDBTitle: crystal structure of uncharacterized protein (np_599989.1) from2 corynebacterium glutamicum atcc 13032 kitasato at 1.44 a resolution
95	d2bf5a1	Alignment	not modelled	5.2	14	Fold: Monoxygenase (hydroxylase) regulatory protein Superfamily: Monoxygenase (hydroxylase) regulatory protein Family: Monoxygenase (hydroxylase) regulatory protein
96	c2x3yA	Alignment	not modelled	5.2	7	PDB header: isomerase Chain: A: PDB Molecule: phosphoheptose isomerase; PDBTitle: crystal structure of gmha from burkholderia pseudomallei
97	c2aj6A	Alignment	not modelled	5.1	19	PDB header: transferase Chain: A: PDB Molecule: hypothetical protein mw0638; PDBTitle: crystal structure of a putative gnat family acetyltransferase (mw0638)2 from staphylococcus aureus subsp. aureus at 1.63 a resolution
98	c2p61A	Alignment	not modelled	5.1	7	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein tm_1646; PDBTitle: crystal structure of protein tm1646 from thermotoga2 maritima, pfam duf327