








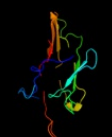


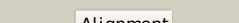


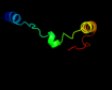





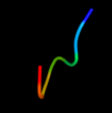




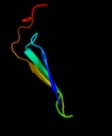
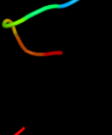
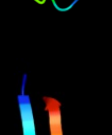
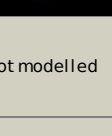
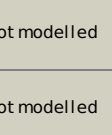


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P40710
Date	Thu Jan 5 12:01:13 GMT 2012
Unique Job ID	e36d1a927fa628c6

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2z4hB_	 Alignment		100.0	100	PDB header: signaling protein activator Chain: B: PDB Molecule: copper homeostasis protein cutf; PDBTitle: crystal structure of the cpx pathway activator nlpe from2 escherichia coli
2	c3lhnB_	 Alignment		100.0	36	PDB header: lipid binding protein Chain: B: PDB Molecule: lipoprotein; PDBTitle: crystal structure of putative lipoprotein (np_718719.1) from2 shewanella oneidensis at 1.42 a resolution
3	d1jiwi_	 Alignment		74.1	16	Fold: Streptavidin-like Superfamily: beta-Barrel protease inhibitors Family: Metalloprotease inhibitor
4	c3ge2A_	 Alignment		65.8	16	PDB header: lipoprotein Chain: A: PDB Molecule: lipoprotein, putative; PDBTitle: crystal structure of putative lipoprotein sp_0198 from streptococcus2 pneumoniae
5	c3p02A_	 Alignment		34.4	8	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a protein of unknown function (bacova_00267) from2 bacteroides ovatus at 1.55 a resolution
6	d2q4ma1	 Alignment		27.2	29	Fold: Tubby C-terminal domain-like Superfamily: Tubby C-terminal domain-like Family: At5g01750-like
7	c1zxuA_	 Alignment		27.2	29	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: at5g01750 protein; PDBTitle: x-ray structure of protein from arabidopsis thaliana2 at5g01750
8	c3o0rC_	 Alignment		22.9	11	PDB header: immune system/oxidoreductase Chain: C: PDB Molecule: nitric oxide reductase subunit c; PDBTitle: crystal structure of nitric oxide reductase from pseudomonas2 aeruginosa in complex with antibody fragment
9	c1brvA_	 Alignment		18.2	47	PDB header: glycoprotein Chain: A: PDB Molecule: protein g; PDBTitle: solution nmr structure of the immunodominant region of2 protein g of bovine respiratory syncytial virus, 483 structures
10	d1jhna4	 Alignment		18.0	21	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Calnexin/calreticulin
11	d1hxra_	 Alignment		17.6	86	Fold: Mss4-like Superfamily: Mss4-like Family: RabGEF Mss4

12	c3p43A	Alignment		17.4	19	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: structure and activities of archaeal members of the ligd 3'2 phosphoesterase dna repair enzyme superfamily
13	d2fu5a1	Alignment		17.4	86	Fold: Mss4-like Superfamily: Mss4-like Family: RabGEF Mss4
14	d1rc9a2	Alignment		15.3	57	Fold: Crisp domain-like Superfamily: Crisp domain-like Family: Crisp domain
15	c1nuia	Alignment		15.3	24	PDB header: replication Chain: A: PDB Molecule: dna primase/helicase; PDBTitle: crystal structure of the primase fragment of bacteriophage t7 primase-2 helicase protein
16	d2fm8a1	Alignment		15.2	17	Fold: Secretion chaperone-like Superfamily: Type III secretory system chaperone-like Family: Type III secretory system chaperone
17	d2hh8a1	Alignment		15.1	6	Fold: YdfO-like Superfamily: YdfO-like Family: YdfO-like
18	c2l6nA	Alignment		14.1	43	PDB header: structure genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein yp_001092504.1; PDBTitle: nmr solution structure of the protein yp_001092504.1
19	c3hyxC	Alignment		13.9	56	PDB header: oxidoreductase Chain: C: PDB Molecule: sulfide-quinone reductase; PDBTitle: 3-d x-ray structure of the sulfide:quinone oxidoreductase from aquifex2 aeolicus in complex with aurachin c
20	c3rg0A	Alignment		13.8	21	PDB header: chaperone Chain: A: PDB Molecule: calreticulin; PDBTitle: structural and functional relationships between the lectin and arm2 domains of calreticulin
21	c2bx9J	Alignment	not modelled	12.9	38	PDB header: transcription regulation Chain: J: PDB Molecule: tryptophan rna-binding attenuator protein-inhibitory PDBTitle: crystal structure of b.subtilis anti-trap protein, an2 antagonist of trap-rna interactions
22	d1j8ra	Alignment	not modelled	12.6	16	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Bacterial adhesins Family: PapG adhesin receptor-binding domain
23	c2l6pA	Alignment	not modelled	11.5	43	PDB header: structure genomics, unknown function Chain: A: PDB Molecule: phac1, phac2 and phad genes; PDBTitle: nmr solution structure of the protein np_253742.1
24	c2ktsA	Alignment	not modelled	10.8	25	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein hslj; PDBTitle: nmr structure of the protein np_415897.1
25	c1jhnA	Alignment	not modelled	10.4	21	PDB header: chaperone Chain: A: PDB Molecule: calnexin; PDBTitle: crystal structure of the luminal domain of calnexin
26	d1oyvi	Alignment	not modelled	10.0	29	Fold: Plant proteinase inhibitors Superfamily: Plant proteinase inhibitors Family: Plant proteinase inhibitors
27	d1r7aa1	Alignment	not modelled	9.9	30	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
28	c2ovsB	Alignment	not modelled	9.8	8	PDB header: gene regulation, ligand binding protein Chain: B: PDB Molecule: I0044; PDBTitle: crystal strcuture of a type three secretion system protein
						Fold: beta-beta-alpha zinc fingers

29	d2eppa1	Alignment	not modelled	9.2	45	Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
30	d2dsya1	Alignment	not modelled	8.8	24	Fold: TTHA1013/TTHA0281-like Superfamily: TTHA1013/TTHA0281-like Family: TTHA0281-like
31	c2dcrA_	Alignment	not modelled	8.2	18	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase fes/fps; PDBTitle: fully automated solution structure determination of the fes2 sh2 domain
32	c3kg9A_	Alignment	not modelled	8.1	11	PDB header: lyase Chain: A: PDB Molecule: curk; PDBTitle: dehydratase domain from curk module of curacin polyketide synthase
33	d1vlva1	Alignment	not modelled	8.1	16	Fold: Elongation factor/aminomethyltransferase common domain Superfamily: Aminomethyltransferase beta-barrel domain Family: Aminomethyltransferase beta-barrel domain
34	d2aqaa1	Alignment	not modelled	8.1	40	Fold: Rubredoxin-like Superfamily: Nop10-like SnoRNP Family: Nucleolar RNA-binding protein Nop10-like
35	d2bpa2_	Alignment	not modelled	8.0	29	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: ssDNA viruses Family: Microviridae-like VP
36	c3luuA_	Alignment	not modelled	7.9	60	PDB header: biosynthetic protein Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of protein with unknown function which belongs to2 pfam duf971 family (afe_2189) from acidithiobacillus ferrooxidans3 atcc 23270 at 1.93 a resolution
37	d1w0na_	Alignment	not modelled	7.9	25	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: Family 36 carbohydrate binding module, CBM36
38	d1o6da_	Alignment	not modelled	7.9	24	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
39	d1wgea1	Alignment	not modelled	7.9	38	Fold: Rubredoxin-like Superfamily: CSL zinc finger Family: CSL zinc finger
40	d1gff2_	Alignment	not modelled	7.8	36	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: ssDNA viruses Family: Microviridae-like VP
41	c1n1uA_	Alignment	not modelled	7.6	25	PDB header: antibiotic Chain: A: PDB Molecule: kalata b1; PDBTitle: nmr structure of [ala1,15]kalata b1
42	d1n1ua_	Alignment	not modelled	7.6	25	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Cyclotides Family: Kalata B1
43	c1r8oA_	Alignment	not modelled	7.6	38	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: kunitz trypsin inhibitor; PDBTitle: crystal structure of an unusual kunitz-type trypsin inhibitor from2 copaifera langsdorffii seeds
44	c3cjtP_	Alignment	not modelled	7.5	6	PDB header: transferase/ribosomal protein Chain: P: PDB Molecule: 50s ribosomal protein l11; PDBTitle: ribosomal protein l11 methyltransferase (prma) in complex with2 dimethylated ribosomal protein l11
45	c3ld0Q_	Alignment	not modelled	7.4	38	PDB header: gene regulation Chain: Q: PDB Molecule: inhibitor of trap, regulated by t-box (trp) sequence rtpa; PDBTitle: crystal structure of b.licheniformis anti-trap protein, an antagonist2 of trap-rna interactions
46	d2gvia2	Alignment	not modelled	7.4	67	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: FwdE C-terminal domain-like
47	c3n9dA_	Alignment	not modelled	7.3	17	PDB header: ligase Chain: A: PDB Molecule: probable atp-dependent dna ligase; PDBTitle: monoclinic structure of p. aeruginosa ligd phosphoesterase domain
48	d1mila_	Alignment	not modelled	7.2	25	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
49	d1ns5a_	Alignment	not modelled	7.2	24	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
50	c2knnA_	Alignment	not modelled	7.2	50	PDB header: plant protein Chain: A: PDB Molecule: cycloviolacin-o2; PDBTitle: solution structure of the cyclotide cycloviolacin o2 with2 glu6 methylated (cyo2me)
51	c2qn4B_	Alignment	not modelled	7.2	29	PDB header: hydrolase inhibitor Chain: B: PDB Molecule: alpha-amylase/subtilisin inhibitor; PDBTitle: structure and function study of rice bifunctional alpha-2 amylase/subtilisin inhibitor from oryza sativa
52	d1to0a_	Alignment	not modelled	7.1	24	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
53	d1vh0a_	Alignment	not modelled	7.1	18	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: YbeA-like
54	c2f2iA_	Alignment	not modelled	6.8	25	PDB header: antimicrobial protein Chain: A: PDB Molecule: kalata-b1; PDBTitle: solution structure of [p20d,v21k]-kalata b1
55	d1avwb_	Alignment	not modelled	6.7	57	Fold: beta-Trefoil Superfamily: STI-like

						Family: Kunitz (STI) inhibitors
56	dlnb1a_	Alignment	not modelled	6.6	25	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Cyclotides Family: Kalata B1
57	d1ha8a_	Alignment	not modelled	6.6	63	Fold: Pheromone ER-23 Superfamily: Pheromone ER-23 Family: Pheromone ER-23
58	d1lrva_	Alignment	not modelled	6.6	38	Fold: alpha-alpha superhelix Superfamily: ARM repeat Family: Leucine-rich repeat variant
59	c3o6uB_	Alignment	not modelled	6.6	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein cpe2226; PDBTitle: crystal structure of cpe2226 protein from clostridium perfringens.2 northeast structural genomics consortium target cpr195
60	d1fnoa3	Alignment	not modelled	6.5	9	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
61	d1pt4a_	Alignment	not modelled	6.5	25	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Cyclotides Family: Kalata B1
62	c2l6lA_	Alignment	not modelled	6.5	18	PDB header: chaperone Chain: A: PDB Molecule: dnaj homolog subfamily c member 24; PDBTitle: solution structure of human j-protein co-chaperone, dph4
63	c2kzxA_	Alignment	not modelled	6.5	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of a3dht5 from clostridium thermocellum,2 northeast structural genomics consortium target cmr116
64	d1cf1a1	Alignment	not modelled	6.4	29	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Arrestin/Vps26-like
65	c2f2jA_	Alignment	not modelled	6.4	25	PDB header: antimicrobial protein Chain: A: PDB Molecule: kalata-b1; PDBTitle: solution structure of [w19k, p20n, v21k]-kalata b1
66	c2zkrk_	Alignment	not modelled	6.3	9	PDB header: ribosomal protein/rna Chain: K: PDB Molecule: rna expansion segment es19; PDBTitle: structure of a mammalian ribosomal 60s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
67	c2khbA_	Alignment	not modelled	6.3	25	PDB header: antimicrobial protein Chain: A: PDB Molecule: kalata-b1; PDBTitle: solution structure of linear kalata b1 (loop 6)
68	c1iebD_	Alignment	not modelled	6.0	20	PDB header: histocompatibility antigen Chain: D: PDB Molecule: mhc class ii i-ek; PDBTitle: histocompatibility antigen
69	d1m3va1	Alignment	not modelled	6.0	57	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
70	d1r8na_	Alignment	not modelled	5.8	36	Fold: beta-Trefoil Superfamily: STI-like Family: Kunitz (STI) inhibitors
71	d1mmsa2	Alignment	not modelled	5.7	6	Fold: Ribosomal L11/L12e N-terminal domain Superfamily: Ribosomal L11/L12e N-terminal domain Family: Ribosomal L11/L12e N-terminal domain
72	c2xvoB_	Alignment	not modelled	5.7	32	PDB header: structural genomics Chain: B: PDB Molecule: sso1725; PDBTitle: sso1725, a protein involved in the crispr/cas pathway
73	d1vqok1	Alignment	not modelled	5.7	14	Fold: Ribosomal protein L14 Superfamily: Ribosomal protein L14 Family: Ribosomal protein L14
74	c3swrA_	Alignment	not modelled	5.6	14	PDB header: transferase Chain: A: PDB Molecule: dna (cytosine-5)-methyltransferase 1; PDBTitle: structure of human dnmt1 (601-1600) in complex with sinefungin
75	d3cjsb1	Alignment	not modelled	5.6	6	Fold: Ribosomal L11/L12e N-terminal domain Superfamily: Ribosomal L11/L12e N-terminal domain Family: Ribosomal L11/L12e N-terminal domain
76	d1v1qa_	Alignment	not modelled	5.5	14	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
77	d2hz5a1	Alignment	not modelled	5.4	26	Fold: Profilin-like Superfamily: Roadblock/LC7 domain Family: Roadblock/LC7 domain
78	c2jmbA_	Alignment	not modelled	5.4	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein atu4866; PDBTitle: solution structure of the protein atu4866 from agrobacterium2 tumefaciens
79	d1whia_	Alignment	not modelled	5.4	23	Fold: Ribosomal protein L14 Superfamily: Ribosomal protein L14 Family: Ribosomal protein L14
80	d1sg1x2	Alignment	not modelled	5.3	31	Fold: TNF receptor-like Superfamily: TNF receptor-like Family: TNF receptor-like
81	c2p57A_	Alignment	not modelled	5.3	55	PDB header: metal binding protein Chain: A: PDB Molecule: gtpase-activating protein znf289; PDBTitle: gap domain of znf289, an id1-regulated zinc finger protein PDB header: structural genomics, unknown function

82	c2p3yA_	Alignment	not modelled	5.3	25	Chain: A: PDB Molecule: hypothetical protein vpa0735; PDBTitle: crystal structure of vpa0735 from vibrio parahaemolyticus. northeast2 structural genomics target vpr109
83	d2p3ya1	Alignment	not modelled	5.3	25	Fold: VPA0735-like Superfamily: VPA0735-like Family: VPA0735-like
84	d2f2ha1	Alignment	not modelled	5.3	27	Fold: Putative glucosidase YicI, C-terminal domain Superfamily: Putative glucosidase YicI, C-terminal domain Family: Putative glucosidase YicI, C-terminal domain
85	d1tiea_	Alignment	not modelled	5.3	29	Fold: beta-Trefoil Superfamily: STI-like Family: Kunitz (STI) inhibitors
86	d1eyla_	Alignment	not modelled	5.3	43	Fold: beta-Trefoil Superfamily: STI-like Family: Kunitz (STI) inhibitors
87	c3g12A_	Alignment	not modelled	5.2	38	PDB header: lyase Chain: A: PDB Molecule: putative lactoylglutathione lyase; PDBTitle: crystal structure of a putative lactoylglutathione lyase2 from bdellovibrio bacteriovorus
88	d3bx1c1	Alignment	not modelled	5.1	29	Fold: beta-Trefoil Superfamily: STI-like Family: Kunitz (STI) inhibitors
89	c1y7jA_	Alignment	not modelled	5.1	80	PDB header: signaling protein Chain: A: PDB Molecule: agouti signaling protein; PDBTitle: nmr structure family of human agouti signalling protein (80-2 132: q115y, s124y)
90	c2owaB_	Alignment	not modelled	5.1	27	PDB header: protein transport Chain: B: PDB Molecule: arfgap-like finger domain containing protein; PDBTitle: crystal structure of putative gtpase activating protein for2 adp ribosylation factor from cryptosporidium parvum3 (cgd5_1040)
91	c2dreA_	Alignment	not modelled	5.1	36	PDB header: plant protein Chain: A: PDB Molecule: water-soluble chlorophyll protein; PDBTitle: crystal structure of water-soluble chlorophyll protein from2 lepidium virginicum at 2.00 angstrom resolution