


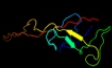






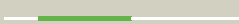


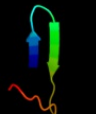







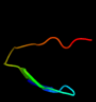
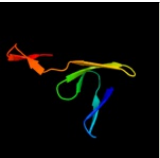
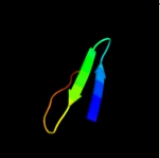
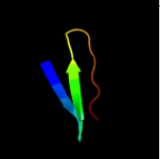
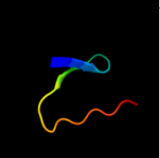
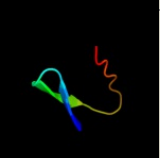
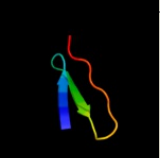
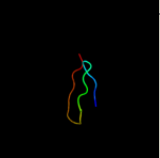
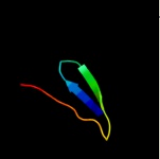
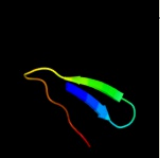


Phyre2






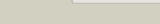
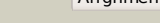

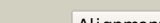


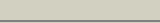
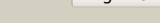
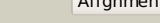

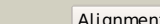



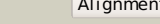

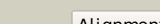

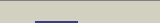
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Description	P0AG48
Date	Thu Jan 5 11:28:07 GMT 2012
Unique Job ID	75bda8a866578675

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2qamr1	 Alignment		100.0	100	Fold: L21p-like Superfamily: L21p-like Family: Ribosomal protein L21p
2	c3bboT_	 Alignment		100.0	30	PDB header: ribosome Chain: T: PDB Molecule: ribosomal protein l21; PDBTitle: homology model for the spinach chloroplast 50s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome
3	d2j01v1	 Alignment		100.0	44	Fold: L21p-like Superfamily: L21p-like Family: Ribosomal protein L21p
4	d2zjro1	 Alignment		100.0	44	Fold: L21p-like Superfamily: L21p-like Family: Ribosomal protein L21p
5	c2gu9B_	 Alignment		54.7	14	PDB header: immune system Chain: B: PDB Molecule: tetracenomycin polyketide synthesis protein; PDBTitle: crystal structure of xc5357 from xanthomonas campestris: a2 putative tetracenomycin polyketide synthesis protein3 adopting a novel cupin subfamily structure
6	c2lc4A_	 Alignment		51.2	19	PDB header: structural protein Chain: A: PDB Molecule: piIp protein; PDBTitle: solution structure of piIp from pseudomonas aeruginosa
7	d2arca_	 Alignment		50.7	14	Fold: Double-stranded beta-helix Superfamily: Regulatory protein AraC Family: Regulatory protein AraC
8	c3ibmB_	 Alignment		47.0	10	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of cupin 2 domain-containing protein hha1_0468 from2 halorhodospira halophila
9	c3ossC_	 Alignment		43.9	23	PDB header: protein transport Chain: C: PDB Molecule: type 2 secretion system, gspc; PDBTitle: the crystal structure of enterotoxigenic escherichia coli gspc-gspd2 complex from the type ii secretion system
10	c3m9bK_	 Alignment		41.5	13	PDB header: chaperone Chain: K: PDB Molecule: proteasome-associated atpase; PDBTitle: crystal structure of the amino terminal coiled coil domain and the2 inter domain of the mycobacterium tuberculosis proteasomal atpase mpa
11	c3d82A_	 Alignment		40.3	9	PDB header: metal binding protein Chain: A: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of a cupin-2 domain containing protein (sfri_3543)2 from shewanella frigidimarina ncimb 400 at 2.05 a resolution

12	c2ivwA	Alignment		40.2	15	PDB header: lipoprotein Chain: A: PDB Molecule: pilp pilot protein; PDBTitle: the solution structure of a domain from the neisseria2 meningitidis pilp pilot protein.
13	c3kgzA	Alignment		39.8	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: cupin 2 conserved barrel domain protein; PDBTitle: crystal structure of a cupin 2 conserved barrel domain protein from2 rhodopseudomonas palustris
14	d1sfna	Alignment		38.8	10	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: YlbA-like
15	d1sq4a	Alignment		38.2	24	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: YlbA-like
16	d1sefa	Alignment		37.4	10	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: YlbA-like
17	c1sefA	Alignment		37.4	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of cupin domain protein ef2996 from enterococcus2 faecalis
18	d1rc6a	Alignment		37.1	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: YlbA-like
19	d1o4ta	Alignment		36.1	23	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
20	c2vpvA	Alignment		36.1	10	PDB header: cell cycle Chain: A: PDB Molecule: protein mif2; PDBTitle: dimerization domain of mif2p
21	d1vj2a	Alignment	not modelled	36.0	19	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1459-like
22	c3cewA	Alignment	not modelled	34.4	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized cupin protein; PDBTitle: crystal structure of a cupin protein (bf4112) from bacteroides2 fragilis. northeast structural genomics consortium target bfr205
23	d1y9qa2	Alignment	not modelled	33.5	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Probable transcriptional regulator VC1968, C-terminal domain
24	c3lwcA	Alignment	not modelled	28.8	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of structural genomics, unknown function2 (yp_766765.1) from rhizobium leguminosarum bv. viciae 3841 at 1.40 a3 resolution
25	c2ozjB	Alignment	not modelled	27.6	10	PDB header: unknown function Chain: B: PDB Molecule: cupin 2, conserved barrel; PDBTitle: crystal structure of a cupin superfamily protein (dsy2733) from2 desulfitobacterium hafniense dcb-2 at 1.60 a resolution
26	c3h7yA	Alignment	not modelled	27.1	14	PDB header: biosynthetic protein Chain: A: PDB Molecule: bacilysin biosynthesis protein bacb; PDBTitle: crystal structure of bacb, an enzyme involved in bacilysin synthesis,2 in tetragonal form
27	c3fjsC	Alignment	not modelled	26.4	24	PDB header: biosynthetic protein Chain: C: PDB Molecule: uncharacterized protein with rmlc-like cupin fold; PDBTitle: crystal structure of a putative biosynthetic protein with rmlc-like2 cupin fold (reut_b4087) from ralstonia eutropha jnp134 at 1.90 a3 resolution

28	dlyhfa1	Alignment	not modelled	26.0	33	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
29	c3l2hD_	Alignment	not modelled	25.8	14	PDB header: isomerase Chain: D: PDB Molecule: putative sugar phosphate isomerase; PDBTitle: crystal structure of putative sugar phosphate isomerase (afe_0303)2 from acidithiobacillus ferrooxidans atcc 23270 at 1.85 a resolution
30	c3jzvA_	Alignment	not modelled	25.1	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein rru_a2000; PDBTitle: crystal structure of rru_a2000 from rhodospirillum rubrum: a cupin-22 domain.
31	dlwpga1	Alignment	not modelled	22.9	16	Fold: Double-stranded beta-helix Superfamily: Calcium ATPase, transduction domain A Family: Calcium ATPase, transduction domain A
32	c2pfwB_	Alignment	not modelled	20.1	10	PDB header: unknown function Chain: B: PDB Molecule: cupin 2, conserved barrel domain protein; PDBTitle: crystal structure of a rmlc-like cupin (sfri_3105) from shewanella2 frigidimarina ncimb 400 at 1.90 a resolution
33	c1d8lA_	Alignment	not modelled	19.3	17	PDB header: gene regulation Chain: A: PDB Molecule: protein (holliday junction dna helicase ruva); PDBTitle: e. coli holliday junction binding protein ruva nh2 region2 lacking domain iii
34	c3i7dB_	Alignment	not modelled	18.9	14	PDB header: isomerase Chain: B: PDB Molecule: sugar phosphate isomerase; PDBTitle: crystal structure of sugar phosphate isomerase from a cupin2 superfamily spo2919 from silicibacter pomeroyi (yp_168127.1) from3 silicibacter pomeroyi dss-3 at 2.30 a resolution
35	dlcuka3	Alignment	not modelled	18.6	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: DNA helicase RuvA subunit, N-terminal domain
36	dlvqow1	Alignment	not modelled	18.5	44	Fold: Ribosomal protein L30p/L7e Superfamily: Ribosomal protein L30p/L7e Family: Ribosomal protein L30p/L7e
37	dlv70a_	Alignment	not modelled	18.0	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
38	d2pyta1	Alignment	not modelled	15.4	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: EutQ-like
39	d2f4pa1	Alignment	not modelled	15.1	19	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
40	c2h5xA_	Alignment	not modelled	14.6	17	PDB header: dna binding protein Chain: A: PDB Molecule: holliday junction atp-dependent dna helicase ruva; PDBTitle: ruva from mycobacterium tuberculosis
41	c2q30C_	Alignment	not modelled	13.6	10	PDB header: unknown function Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a rmlc-like cupin protein (dde_2303) from2 desulfovibrio desulfuricans subsp. at 1.94 a resolution
42	c1hjpA_	Alignment	not modelled	13.2	17	PDB header: dna recombination Chain: A: PDB Molecule: ruva; PDBTitle: holliday junction binding protein ruva from e. coli
43	c3acqA_	Alignment	not modelled	13.1	17	PDB header: hydrolase Chain: A: PDB Molecule: beta-1,4-endoglucanase; PDBTitle: crystal structure of carbohydrate-binding module family 282 from clostridium josui cel5a in complex with cellobiose
44	dl05ua_	Alignment	not modelled	12.7	23	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Hypothetical protein TM1112
45	dlbvsA3	Alignment	not modelled	12.6	15	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: DNA helicase RuvA subunit, N-terminal domain
46	dlixa2	Alignment	not modelled	12.2	20	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: DNA helicase RuvA subunit, N-terminal domain
47	c3fp9E_	Alignment	not modelled	12.1	13	PDB header: hydrolase Chain: E: PDB Molecule: proteasome-associated atpase; PDBTitle: crystal structure of intern domain of proteasome-associated2 atpase, mycobacterium tuberculosis
48	c3rnsA_	Alignment	not modelled	11.8	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: cupin 2 conserved barrel domain protein; PDBTitle: cupin 2 conserved barrel domain protein from leptotrichia buccalis
49	c2ejgD_	Alignment	not modelled	11.5	13	PDB header: ligase Chain: D: PDB Molecule: 149aa long hypothetical methylmalonyl-coa decarboxylase PDBTitle: crystal structure of the biotin protein ligase (mutation r48a) and2 biotin carboxyl carrier protein complex from pyrococcus horikoshii3 ot3
50	dlvcpa_	Alignment	not modelled	10.8	38	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral proteases
51	c2wkDA_	Alignment	not modelled	10.5	19	PDB header: dna binding protein Chain: A: PDB Molecule: orf34p2; PDBTitle: crystal structure of a double ile-to-met mutant of protein2 orf34 from lactococcus phage p2
52	dlwyka_	Alignment	not modelled	10.3	38	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral proteases

53	c2i45C	 Alignment	not modelled	10.1	18	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of protein nmb1881 from neisseria meningitidis
54	c1kxfA	 Alignment	not modelled	9.5	38	PDB header: viral protein Chain: A: PDB Molecule: sindbis virus capsid protein; PDBTitle: sindbis virus capsid, (wild-type) residues 1-264,2 tetragonal crystal form (form ii)
55	d2b8ma1	 Alignment	not modelled	9.3	19	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: MJ0764-like
56	d2cqaa1	 Alignment	not modelled	9.3	25	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: TIP49 domain
57	d1ep5a	 Alignment	not modelled	9.3	38	Fold: Trypsin-like serine proteases Superfamily: Trypsin-like serine proteases Family: Viral proteases
58	d1uwwa	 Alignment	not modelled	8.3	17	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: Family 28 carbohydrate binding module, CBM28
59	c1b5fD	 Alignment	not modelled	7.7	19	PDB header: hydrolase Chain: D: PDB Molecule: protein (cardosin a); PDBTitle: native cardosin a from cynara cardunculus l.
60	c2o8qA	 Alignment	not modelled	7.5	10	PDB header: metal binding protein Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a protein with a cupin-like fold and unknown2 function (bx_e_c0505) from burkholderia xenovorans lb400 at 1.55 a3 resolution
61	c2x48B	 Alignment	not modelled	7.2	22	PDB header: viral protein Chain: B: PDB Molecule: cag38821; PDBTitle: orf 55 from sulfolobus islandicus rudivirus 1
62	c3cw3A	 Alignment	not modelled	7.1	27	PDB header: oncoprotein Chain: A: PDB Molecule: absent in melanoma 1 protein; PDBTitle: crystal structure of aim1g1
63	d2ae8a2	 Alignment	not modelled	6.7	12	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Imidazole glycerol phosphate dehydratase
64	d1dgwa	 Alignment	not modelled	6.6	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
65	c3a35B	 Alignment	not modelled	6.6	14	PDB header: luminescent protein Chain: B: PDB Molecule: lumazine protein; PDBTitle: crystal structure of lump complexed with riboflavin
66	c3i0mA	 Alignment	not modelled	6.3	14	PDB header: cell cycle Chain: A: PDB Molecule: dna repair and telomere maintenance protein nbs1; PDBTitle: structure of the s. pombe nbs1 fha/brct-repeat domain
67	d2fug33	 Alignment	not modelled	6.3	19	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
68	c3myxA	 Alignment	not modelled	6.2	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein pspto_0244; PDBTitle: crystal structure of a pspto_0244 (protein with unknown function which2 belongs to pfam duf861 family) from pseudomonas syringae pv. tomato3 str. dc3000 at 1.30 a resolution
69	d1rhya2	 Alignment	not modelled	6.0	12	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Imidazole glycerol phosphate dehydratase
70	c2aujD	 Alignment	not modelled	5.9	26	PDB header: transferase Chain: D: PDB Molecule: dna-directed rna polymerase beta' chain; PDBTitle: structure of thermus aquaticus rna polymerase beta'-subunit2 insert
71	d1uija1	 Alignment	not modelled	5.7	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
72	d1uika1	 Alignment	not modelled	5.6	14	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
73	c2opkC	 Alignment	not modelled	5.5	14	PDB header: isomerase Chain: C: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a putative mannose-6-phosphate isomerase2 (reut_a1446) from ralstonia eutropha jmp134 at 2.10 a resolution
74	c2d40C	 Alignment	not modelled	5.5	10	PDB header: oxidoreductase Chain: C: PDB Molecule: putative gentisate 1,2-dioxygenase; PDBTitle: crystal structure of z3393 from escherichia coli o157:h7
75	d1u0la1	 Alignment	not modelled	5.3	30	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
76	d1i8da1	 Alignment	not modelled	5.1	12	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin synthase domain-like Family: Riboflavin synthase