

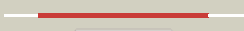












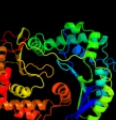











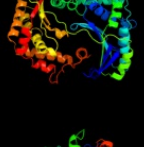

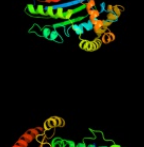
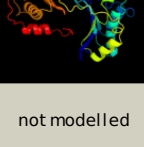


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P31828
Date	Thu Jan 5 11:48:53 GMT 2012
Unique Job ID	f5118e3e834c0a41

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2jbuB_	 Alignment		100.0	14	PDB header: hydrolase Chain: B: PDB Molecule: insulin-degrading enzyme; PDBTitle: crystal structure of human insulin degrading enzyme2 complexed with co-purified peptides.
2	c2wk3A_	 Alignment		100.0	14	PDB header: hydrolase Chain: A: PDB Molecule: insulin degrading enzyme; PDBTitle: crystal structure of human insulin-degrading enzyme in2 complex with amyloid-beta (1-42)
3	c1q2lA_	 Alignment		100.0	13	PDB header: hydrolase Chain: A: PDB Molecule: protease iii; PDBTitle: crystal structure of pitrilysin
4	c2fgeA_	 Alignment		100.0	10	PDB header: hydrolase, plant protein Chain: A: PDB Molecule: zinc metalloprotease (insulinase family); PDBTitle: crystal structure of presequence protease prep from2 arabidopsis thaliana
5	c3go9A_	 Alignment		100.0	20	PDB header: hydrolase Chain: A: PDB Molecule: insulinase family protease; PDBTitle: predicted insulinase family protease from yersinia pestis
6	c1sqpA_	 Alignment		100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: ubiquinol-cytochrome-c reductase complex core protein i, PDBTitle: crystal structure analysis of bovine bc1 with myxothiazol
7	c1hr9D_	 Alignment		100.0	17	PDB header: hydrolase Chain: D: PDB Molecule: mitochondrial processing peptidase beta subunit; PDBTitle: yeast mitochondrial processing peptidase beta-e73q mutant2 complexed with malate dehydrogenase signal peptide
8	c1nu1A_	 Alignment		100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: ubiquinol-cytochrome c reductase complex core protein i, PDBTitle: crystal structure of mitochondrial cytochrome bc1 complexed with 2-2 nonyl-4-hydroxyquinoline n-oxide (nqno)
9	c1hr6C_	 Alignment		100.0	13	PDB header: hydrolase Chain: C: PDB Molecule: mitochondrial processing peptidase alpha subunit; PDBTitle: yeast mitochondrial processing peptidase
10	c3amiB_	 Alignment		100.0	20	PDB header: hydrolase Chain: B: PDB Molecule: zinc peptidase; PDBTitle: the crystal structure of the m16b metallopeptidase subunit from2 sphingomonas sp. a1
11	c3eoqB_	 Alignment		100.0	20	PDB header: hydrolase Chain: B: PDB Molecule: putative zinc protease; PDBTitle: the crystal structure of putative zinc protease beta-2 subunit from thermus thermophilus hb8

12	c3hdiA_	Alignment		100.0	22	PDB header: hydrolase Chain: A: PDB Molecule: processing protease; PDBTitle: crystal structure of bacillus halodurans metallo peptidase
13	c1l0lB_	Alignment		100.0	15	PDB header: oxidoreductase Chain: B: PDB Molecule: ubiquinol-cytochrome c reductase complex core protein 2; PDBTitle: structure of bovine mitochondrial cytochrome bc1 complex with a bound2 fungicide famoxadone
14	c3gwbA_	Alignment		100.0	16	PDB header: hydrolase Chain: A: PDB Molecule: peptidase m16 inactive domain family protein; PDBTitle: crystal structure of peptidase m16 inactive domain from pseudomonas2 fluorescens. northeast structural genomics target plr293l
15	c3amjB_	Alignment		100.0	15	PDB header: hydrolase Chain: B: PDB Molecule: zinc peptidase inactive subunit; PDBTitle: the crystal structure of the heterodimer of m16b peptidase from2 sphingomonas sp. a1
16	c3cx5L_	Alignment		100.0	16	PDB header: oxidoreductase Chain: L: PDB Molecule: cytochrome b-c1 complex subunit 1, mitochondrial; PDBTitle: structure of complex iii with bound cytochrome c in reduced2 state and definition of a minimal core interface for3 electron transfer.
17	c3d3yA_	Alignment		100.0	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a conserved protein from enterococcus faecalis2 v583
18	d2fgea4	Alignment		100.0	16	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
19	d1ppja1	Alignment		100.0	24	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
20	c3cxhM_	Alignment		100.0	15	PDB header: oxidoreductase Chain: M: PDB Molecule: cytochrome b-c1 complex subunit 2, mitochondrial; PDBTitle: structure of yeast complex iii with isoform-2 cytochrome c2 bound and definition of a minimal core interface for3 electron transfer.
21	d1hr6b1	Alignment	not modelled	100.0	21	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
22	d1bccal	Alignment	not modelled	100.0	22	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
23	d1hr6a1	Alignment	not modelled	100.0	19	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
24	d1q2la4	Alignment	not modelled	100.0	17	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
25	d1ppjb1	Alignment	not modelled	100.0	18	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
26	d1bccb1	Alignment	not modelled	100.0	16	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
27	d3cx5b1	Alignment	not modelled	100.0	17	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
28	d3cx5a1	Alignment	not modelled	100.0	14	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
29	d1q2la1	Alignment	not modelled	99.9	15	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase

					Family: MPP-like
30	d1hr6b2	Alignment	not modelled	99.9	10 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
31	d1ppjb2	Alignment	not modelled	99.9	7 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
32	d1q2la2	Alignment	not modelled	99.9	11 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
33	c3ivlA_	Alignment	not modelled	99.9	13 PDB header: hydrolase Chain: A: PDB Molecule: putative zinc protease; PDBTitle: the crystal structure of the inactive peptidase domain of a putative2 zinc protease from bordetella parapertussis to 2.2a
34	d1bcc2	Alignment	not modelled	99.9	12 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
35	d1hr6a2	Alignment	not modelled	99.9	9 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
36	d1ppja2	Alignment	not modelled	99.8	12 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
37	d2fgea2	Alignment	not modelled	99.8	6 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
38	d1bccb2	Alignment	not modelled	99.8	9 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
39	d3cx5a2	Alignment	not modelled	99.8	11 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
40	d2fgea1	Alignment	not modelled	99.5	11 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
41	d2fgea3	Alignment	not modelled	99.4	11 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
42	d1q2la3	Alignment	not modelled	99.2	9 Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: MPP-like
43	d1nsha_	Alignment	not modelled	39.5	16 Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
44	c2rgiA_	Alignment	not modelled	35.8	16 PDB header: metal binding protein Chain: A: PDB Molecule: protein s100-a2; PDBTitle: crystal structure of ca2+-free s100a2 at 1.6 a resolution
45	d1a4pa_	Alignment	not modelled	35.2	9 Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
46	d1qlsa_	Alignment	not modelled	33.8	12 Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
47	d1g5ta_	Alignment	not modelled	23.2	17 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
48	c1ko7B_	Alignment	not modelled	22.8	15 PDB header: transferase,hydrolase Chain: B: PDB Molecule: hpr kinase/phosphatase; PDBTitle: x-ray structure of the hpr kinase/phosphatase from2 staphylococcus xylosus at 1.95 a resolution
49	c1g6uB_	Alignment	not modelled	22.2	37 PDB header: de novo protein Chain: B: PDB Molecule: domain swapped dimer; PDBTitle: crystal structure of a domain swapped dimer
50	d1ko7a1	Alignment	not modelled	20.8	15 Fold: MurF and HprK N-domain-like Superfamily: HprK N-terminal domain-like Family: HPr kinase/phoshatase HprK N-terminal domain
51	c2kfvA_	Alignment	not modelled	20.5	23 PDB header: isomerase Chain: A: PDB Molecule: fk506-binding protein 3; PDBTitle: structure of the amino-terminal domain of human fk506-2 binding protein 3 / northeast structural genomics3 consortium target ht99a
52	d1e8aa_	Alignment	not modelled	20.3	12 Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
53	d2rdea1	Alignment	not modelled	19.5	25 Fold: Split barrel-like Superfamily: PilZ domain-like Family: PilZ domain
54	c2y5iF_	Alignment	not modelled	19.2	16 PDB header: metal-binding protein Chain: F: PDB Molecule: s100 calcium binding protein z; PDBTitle: s100z from zebrafish in complex with calcium
55	c1qpoA_	Alignment	not modelled	17.9	10 PDB header: transferase Chain: A: PDB Molecule: quinolinate acid phosphoribosyl transferase; PDBTitle: quinolinate phosphoribosyl transferase (qaprtase) apo-enzyme from2 mycobacterium tuberculosis
					PDB header: transcription Chain: A: PDB Molecule: putative uncharacterized protein

56	c3l7vA	Alignment	not modelled	17.4	13	smu.1377c; PDBTitle: crystal structure of a hypothetical protein smu.1377c from2 streptococcus mutans ua159
57	d1ksoa	Alignment	not modelled	15.7	10	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
58	c2uxsA	Alignment	not modelled	15.2	13	PDB header: hydrolase Chain: A: PDB Molecule: inorganic pyrophosphatase; PDBTitle: 2.7a crystal structure of inorganic pyrophosphatase (rv3628)2 from mycobacterium tuberculosis at ph 7.5
59	d1knxa1	Alignment	not modelled	14.2	14	Fold: MurF and HprK N-domain-like Superfamily: HprK N-terminal domain-like Family: HPr kinase/phoshatase HprK N-terminal domain
60	d1g64b	Alignment	not modelled	13.5	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
61	c3llkA	Alignment	not modelled	12.7	14	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfhydryl oxidase 1; PDBTitle: sulfhydryl oxidase fragment of human qsox1
62	d3c1va1	Alignment	not modelled	12.3	14	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
63	d3cr5x1	Alignment	not modelled	11.8	12	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
64	d1zfsa1	Alignment	not modelled	11.3	15	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
65	c3fhkF	Alignment	not modelled	11.2	17	PDB header: structural genomics, unknown function Chain: F: PDB Molecule: upf0403 protein yphp; PDBTitle: crystal structure of apc1446, b.subtilis yphp disulfide2 isomerase
66	d1qlka	Alignment	not modelled	10.6	10	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
67	c2pbrB	Alignment	not modelled	10.6	12	PDB header: transferase Chain: B: PDB Molecule: thymidylate kinase; PDBTitle: crystal structure of thymidylate kinase (aq_969) from aquifex aeolicus2 vf5
68	d2prda	Alignment	not modelled	10.6	17	Fold: OB-fold Superfamily: Inorganic pyrophosphatase Family: Inorganic pyrophosphatase
69	d3c7ba2	Alignment	not modelled	10.5	12	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: DsrA/DsrB N-terminal-domain-like
70	c3ostA	Alignment	not modelled	10.1	8	PDB header: lipid binding protein Chain: A: PDB Molecule: serine/threonine-protein kinase kcc4; PDBTitle: structure of the kinase associated-1 (ka1) from kcc4p
71	c3lv8A	Alignment	not modelled	9.6	12	PDB header: transferase Chain: A: PDB Molecule: thymidylate kinase; PDBTitle: 1.8 angstrom resolution crystal structure of a thymidylate kinase2 (tmk) from vibrio cholerae o1 biovar eltor str. n16961 in complex3 with tmp, thymidine-5'-diphosphate and adp
72	d2ikba1	Alignment	not modelled	9.4	17	Fold: Lysozyme-like Superfamily: Lysozyme-like Family: NMB1012-like
73	d1zavz1	Alignment	not modelled	9.2	21	Fold: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Superfamily: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Family: Ribosomal protein L7/12, oligomerisation (N-terminal) domain
74	c1zawZ	Alignment	not modelled	9.2	21	PDB header: structural protein Chain: Z: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form a
75	c1zavZ	Alignment	not modelled	9.2	21	PDB header: structural protein Chain: Z: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p21
76	d1l7ba	Alignment	not modelled	9.0	22	Fold: BRCT domain Superfamily: BRCT domain Family: DNA ligase
77	c1zawY	Alignment	not modelled	8.9	21	PDB header: structural protein Chain: Y: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form a
78	c1zawX	Alignment	not modelled	8.9	21	PDB header: structural protein Chain: X: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form a
79	d1pc2a	Alignment	not modelled	8.9	14	Fold: alpha-alpha superhelix Superfamily: TPR-like Family: Tetratricopeptide repeat (TPR)
80	c3pajA	Alignment	not modelled	8.8	16	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase, carboxylating; PDBTitle: 2.00 angstrom resolution crystal structure of a quinolinate2 phosphoribosyltransferase from vibrio cholerae o1 biovar eltor str.3 n16961
81	d1qpoa1	Alignment	not modelled	8.7	10	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like

					Family: NadC C-terminal domain-like
82	dludea_	Alignment	not modelled	8.6	15 Fold: OB-fold Superfamily: Inorganic pyrophosphatase Family: Inorganic pyrophosphatase
83	dlv33a_	Alignment	not modelled	8.6	17 Fold: Prim-pol domain Superfamily: Prim-pol domain Family: PriA-like
84	c1knxF_	Alignment	not modelled	8.6	12 PDB header: transferase/hydrolase Chain: F: PDB Molecule: probable hpr(ser) kinase/phosphatase; PDBTitle: hpr kinase/phosphatase from mycoplasma pneumoniae
85	dltuza_	Alignment	not modelled	8.2	6 Fold: EF Hand-like Superfamily: EF-hand Family: EF-hand modules in multidomain proteins
86	c2yw3E_	Alignment	not modelled	8.2	11 PDB header: lyase Chain: E: PDB Molecule: 4-hydroxy-2-oxoglutarate aldolase/2-deydro-3- PDBTitle: crystal structure analysis of the 4-hydroxy-2-oxoglutarate aldolase/2-2 deydro-3-deoxyphosphogluconate aldolase from tthb1
87	c3qf2B_	Alignment	not modelled	8.0	11 PDB header: apoptosis Chain: B: PDB Molecule: nacht, lrr and pyd domains-containing protein 3; PDBTitle: crystal structure of nalp3 pyd
88	dlulqa_	Alignment	not modelled	8.0	7 Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
89	c3dzzB_	Alignment	not modelled	8.0	13 PDB header: transferase Chain: B: PDB Molecule: putative pyridoxal 5'-phosphate-dependent c-s lyase; PDBTitle: crystal structure of a putative plp-dependent aminotransferase2 (lbul_1103) from lactobacillus delbrueckii subsp. at 1.61 a3 resolution
90	c3gnnA_	Alignment	not modelled	7.9	21 PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of nicotinate-nucleotide2 pyrophosphorylase from burkholderi pseudomallei
91	dlkyqa2	Alignment	not modelled	7.9	11 Fold: Siroheme synthase middle domains-like Superfamily: Siroheme synthase middle domains-like Family: Siroheme synthase middle domains-like
92	c2ebuA_	Alignment	not modelled	7.8	17 PDB header: replication Chain: A: PDB Molecule: replication factor c subunit 1; PDBTitle: solution structure of the brct domain from human2 replication factor c large subunit 1
93	c1zawU_	Alignment	not modelled	7.7	21 PDB header: structural protein Chain: U: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form a
94	c1zawW_	Alignment	not modelled	7.7	21 PDB header: structural protein Chain: W: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form a
95	c1zawV_	Alignment	not modelled	7.7	21 PDB header: structural protein Chain: V: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form a
96	c2b7pA_	Alignment	not modelled	7.7	7 PDB header: transferase Chain: A: PDB Molecule: probable nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of quinolinic acid phosphoribosyltransferase from2 helicobacter pylori
97	c2ld7A_	Alignment	not modelled	7.6	7 PDB header: transcription Chain: A: PDB Molecule: histone deacetylase complex subunit sap30; PDBTitle: solution structure of the msin3a pah3-sap30 sid complex
98	c1zaxZ_	Alignment	not modelled	7.6	21 PDB header: structural protein Chain: Z: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form b
99	c1zaxV_	Alignment	not modelled	7.5	21 PDB header: structural protein Chain: V: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form b