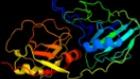
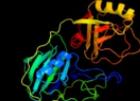
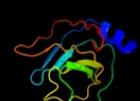
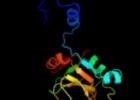
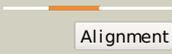
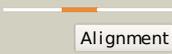
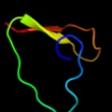
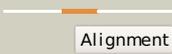
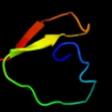
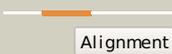
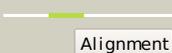
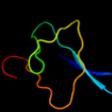
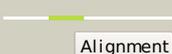
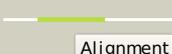
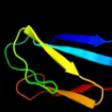
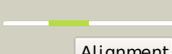
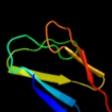
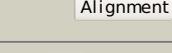
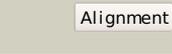
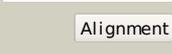


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P75745
Date	Thu Jan 5 12:13:41 GMT 2012
Unique Job ID	946140ee4e120a9f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3mmlE_	 Alignment		100.0	35	PDB header: hydrolase Chain: E; PDB Molecule: allophanate hydrolase subunit 2; PDBTitle: allophanate hydrolase complex from mycobacterium smegmatis, msmeg0435-2 msmeg0436
2	c3oepA_	 Alignment		100.0	35	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: putative uncharacterized protein ttha0988; PDBTitle: crystal structure of ttha0988 in space group p43212
3	c2qf7A_	 Alignment		97.3	8	PDB header: ligase Chain: A; PDB Molecule: pyruvate carboxylase protein; PDBTitle: crystal structure of a complete multifunctional pyruvate carboxylase2 from rhizobium etli
4	c2phcB_	 Alignment		96.1	15	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein ph0987; PDBTitle: crystal structure of conserved uncharacterized protein ph0987 from2 pyrococcus horikoshii
5	d2phcb1	 Alignment		95.6	15	Fold: Cyclophilin-like Superfamily: Cyclophilin-like Family: PH0987 C-terminal domain-like
6	c2zp2B_	 Alignment		95.4	16	PDB header: transferase inhibitor Chain: B; PDB Molecule: kinase a inhibitor; PDBTitle: c-terminal domain of kipi from bacillus subtilis
7	c2p0oA_	 Alignment		93.8	16	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein duf871; PDBTitle: crystal structure of a conserved protein from locus ef_2437 in2 enterococcus faecalis with an unknown function
8	c1x7fa_	 Alignment		91.9	14	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: outer surface protein; PDBTitle: crystal structure of an uncharacterized b. cereus protein
9	d1x7fa1	 Alignment		91.9	13	Fold: Cyclophilin-like Superfamily: Cyclophilin-like Family: Outer surface protein, C-terminal domain
10	c3mmlD_	 Alignment		89.6	15	PDB header: hydrolase Chain: D; PDB Molecule: allophanate hydrolase subunit 1; PDBTitle: allophanate hydrolase complex from mycobacterium smegmatis, msmeg0435-2 msmeg0436
11	c3elsA_	 Alignment		86.3	17	PDB header: splicing Chain: A; PDB Molecule: pre-mrna leakage protein 1; PDBTitle: crystal structure of yeast pml1p, residues 51-204

12	d2piea1	 Alignment		84.9	10	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
13	c1gxcA_	 Alignment		81.4	15	PDB header: phosphoprotein-binding domain Chain: A: PDB Molecule: serine/threonine-protein kinase chk2; PDBTitle: fha domain from human chk2 kinase in complex with a2 synthetic phosphopeptide
14	d1gxca_	 Alignment		81.4	15	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
15	c2jkdB_	 Alignment		80.1	10	PDB header: gene regulation Chain: B: PDB Molecule: pre-mrna leakage protein 1; PDBTitle: structure of the yeast pml1 splicing factor and its2 integration into the res complex
16	d1uhta_	 Alignment		69.2	19	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
17	c2jpeA_	 Alignment		68.0	2	PDB header: transcription Chain: A: PDB Molecule: nuclear inhibitor of protein phosphatase 1; PDBTitle: fha domain of nipp1
18	c3gmgB_	 Alignment		67.8	21	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein rv1825/mt1873; PDBTitle: crystal structure of an uncharacterized conserved protein2 from mycobacterium tuberculosis
19	d2brfa1	 Alignment		66.5	13	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
20	d1ujxa_	 Alignment		65.8	7	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
21	c1vj5C_	 Alignment	not modelled	62.8	11	PDB header: transferase Chain: C: PDB Molecule: 5' polynucleotide kinase-3' phosphatase fha domain; PDBTitle: molecular architecture of mammalian polynucleotide kinase, a dna2 repair enzyme
22	c3poaA_	 Alignment	not modelled	62.3	10	PDB header: peptide binding protein Chain: A: PDB Molecule: putative uncharacterized protein tb39.8; PDBTitle: structural and functional analysis of phosphothreonine-dependent fha2 domain interactions
23	c3kt9A_	 Alignment	not modelled	61.7	16	PDB header: hydrolase Chain: A: PDB Molecule: aprataxin; PDBTitle: aprataxin fha domain
24	d1g3ga_	 Alignment	not modelled	61.5	16	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
25	d2g1la1	 Alignment	not modelled	54.2	20	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
26	c3fm8A_	 Alignment	not modelled	53.9	14	PDB header: transport protein/hydrolase activator Chain: A: PDB Molecule: kinesin-like protein kif13b; PDBTitle: crystal structure of full length centaurin alpha-1 bound with the fha2 domain of kif13b (capri target)
27	c3kf6B_	 Alignment	not modelled	47.4	20	PDB header: structural protein Chain: B: PDB Molecule: protein ten1; PDBTitle: crystal structure of s. pombe stn1-ten1 complex
28	c2eh0A_	 Alignment	not modelled	47.2	12	PDB header: transport protein Chain: A: PDB Molecule: kinesin-like protein kif1b; PDBTitle: solution structure of the fha domain from human kinesin-2 like protein kif1b

29	d1g6ga_	Alignment	not modelled	46.7	15	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
30	d1dmza_	Alignment	not modelled	43.4	17	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
31	d1kf6b2	Alignment	not modelled	41.4	6	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
32	d1yjma1	Alignment	not modelled	40.1	9	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
33	c3hx1B_	Alignment	not modelled	38.4	10	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: slr1951 protein; PDBTitle: crystal structure of the slr1951 protein from synechocystis sp.2 northeast structural genomics consortium target sgr167a
34	c1zeqX_	Alignment	not modelled	38.0	15	PDB header: metal binding protein Chain: X: PDB Molecule: cation efflux system protein cusf; PDBTitle: 1.5 a structure of apo-cusf residues 6-88 from escherichia2 coli
35	c2o55A_	Alignment	not modelled	37.6	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative glycerophosphodiester phosphodiesterase; PDBTitle: crystal structure of a putative glycerophosphodiester2 phosphodiesterase from galdieria sulphuraria
36	d1dm9a_	Alignment	not modelled	36.4	11	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: Heat shock protein 15 kD
37	c1dm9A_	Alignment	not modelled	36.4	11	PDB header: structural genomics Chain: A: PDB Molecule: hypothetical 15.5 kd protein in mrca-pcka PDBTitle: heat shock protein 15 kd
38	d2cu3a1	Alignment	not modelled	34.5	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
39	c2k6pA_	Alignment	not modelled	34.2	18	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein hp_1423; PDBTitle: solution structure of hypothetical protein, hp1423
40	c2kklA_	Alignment	not modelled	34.0	7	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein mb1858; PDBTitle: solution nmr structure of fha domain of mb1858 from2 mycobacterium bovis. northeast structural genomics3 consortium target mbr243c (24-155).
41	c3ks6A_	Alignment	not modelled	30.9	18	PDB header: hydrolase Chain: A: PDB Molecule: glycerophosphoryl diester phosphodiesterase; PDBTitle: crystal structure of putative glycerophosphoryl diester2 phosphodiesterase (17743486) from agrobacterium tumefaciens3 str. c58 (dupont) at 1.80 a resolution
42	d1nekb2	Alignment	not modelled	29.8	6	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
43	c2155A_	Alignment	not modelled	29.8	14	PDB header: metal binding protein Chain: A: PDB Molecule: silb,silver efflux protein, mfp component of the three PDBTitle: solution structure of the c-terminal domain of silb from cupriavidus2 metallidurans
44	c3gqsB_	Alignment	not modelled	29.6	12	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: adenylate cyclase-like protein; PDBTitle: crystal structure of the fha domain of ct664 protein from chlamydia2 trachomatis
45	d1snoa_	Alignment	not modelled	28.2	19	Fold: OB-fold Superfamily: Staphylococcal nuclease Family: Staphylococcal nuclease
46	d2affa1	Alignment	not modelled	27.9	9	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
47	d2ff4a3	Alignment	not modelled	27.6	5	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
48	d1w96c1	Alignment	not modelled	27.5	13	Fold: Barrel-sandwich hybrid Superfamily: Rudiment single hybrid motif Family: BC C-terminal domain-like
49	d1rkna_	Alignment	not modelled	26.5	17	Fold: OB-fold Superfamily: Staphylococcal nuclease Family: Staphylococcal nuclease
50	d1mzka_	Alignment	not modelled	26.4	9	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
51	c2jqlA_	Alignment	not modelled	25.6	13	PDB header: cell cycle Chain: A: PDB Molecule: dna damage response protein kinase dun1; PDBTitle: nmr structure of the yeast dun1 fha domain in complex with2 a doubly phosphorylated (pt) peptide derived from rad533 scd1
52	c3uotB_	Alignment	not modelled	25.6	3	PDB header: cell cycle Chain: B: PDB Molecule: mediator of dna damage checkpoint protein 1; PDBTitle: crystal structure of mdc1 fha domain in complex with a phosphorylated2 peptide from the mdc1 n-terminus
53	c3rlgA_	Alignment	not modelled	25.3	11	PDB header: hydrolase Chain: A: PDB Molecule: sphingomyelin phosphodiesterase d lisi2tox-alpha1a1a;

						PDBTitle: crystal structure of Ixosceles intermedia phospholipase d isoform 12 h12a mutant
54	d1zud21	Alignment	not modelled	24.7	14	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
55	c2zplA	Alignment	not modelled	24.3	26	PDB header: hydrolase Chain: A: PDB Molecule: regulator of sigma e protease; PDBTitle: crystal structure analysis of pdz domain a
56	d2oyza1	Alignment	not modelled	24.2	12	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: VPA0057-like
57	c1r21A	Alignment	not modelled	23.9	9	PDB header: cell cycle Chain: A: PDB Molecule: antigen ki-67; PDBTitle: solution structure of human ki67 fha domain
58	d1lqpa	Alignment	not modelled	22.9	10	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
59	c3rggD	Alignment	not modelled	22.9	28	PDB header: lyase Chain: D: PDB Molecule: phosphoribosylaminoimidazole carboxylase, pure protein; PDBTitle: crystal structure of treponema denticola pure bound to air
60	d2bs2b2	Alignment	not modelled	22.6	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
61	c2g1eA	Alignment	not modelled	22.5	15	PDB header: transferase Chain: A: PDB Molecule: hypothetical protein ta0895; PDBTitle: solution structure of ta0895
62	c2kl0A	Alignment	not modelled	22.4	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative thiamin biosynthesis this; PDBTitle: solution nmr structure of rhodospseudomonas palustris rpa3574,2 northeast structural genomics consortium (nesg) target rpr325
63	c2nnzA	Alignment	not modelled	21.5	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: solution structure of the hypothetical protein af2241 from2 archaeoglobus fulgidus
64	c3eo6B	Alignment	not modelled	21.2	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: protein of unknown function (duf1255); PDBTitle: crystal structure of protein of unknown function (duf1255)2 (afe_2634) from acidithiobacillus ferrooxidans nciB8455 at3 0.97 a resolution
65	d1wlna1	Alignment	not modelled	21.0	12	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
66	d1k92a1	Alignment	not modelled	21.0	33	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
67	c3cwiA	Alignment	not modelled	20.5	13	PDB header: biosynthetic protein Chain: A: PDB Molecule: thiamine-biosynthesis protein this; PDBTitle: crystal structure of thiamine biosynthesis protein (this)2 from geobacter metallireducens. northeast structural3 genomics consortium target gmr137
68	c3rleA	Alignment	not modelled	20.5	33	PDB header: membrane protein Chain: A: PDB Molecule: golgi reassembly-stacking protein 2; PDBTitle: crystal structure of grasp55 grasp domain (residues 7-208)
69	d2z1ca1	Alignment	not modelled	18.9	9	Fold: OB-fold Superfamily: HupF/HypC-like Family: HupF/HypC-like
70	d1v10a2	Alignment	not modelled	17.7	13	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
71	c3i10A	Alignment	not modelled	16.9	31	PDB header: hydrolase Chain: A: PDB Molecule: putative glycerophosphoryl diester phosphodiesterase; PDBTitle: crystal structure of putative glycerophosphoryl diester2 phosphodiesterase (np_812074.1) from bacteroides thetaiotaomicron3 vpi-5482 at 1.35 a resolution
72	c2jrtA	Alignment	not modelled	16.4	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: nmr solution structure of the protein coded by gene2 rhos4_12090 of rhodobacter sphaeroides. northeast3 structural genomics target rhr5
73	d2soba	Alignment	not modelled	15.9	16	Fold: OB-fold Superfamily: Staphylococcal nuclease Family: Staphylococcal nuclease
74	c3hvvB	Alignment	not modelled	15.0	23	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the tgs domain of the clolep_03100 protein from2 clostridium leptum, northeast structural genomics consortium target3 qlr13a
75	c3ju0A	Alignment	not modelled	14.8	38	PDB header: dna binding protein Chain: A: PDB Molecule: phage integrase; PDBTitle: structure of the arm-type binding domain of hai7 integrase
76	d1u1ha1	Alignment	not modelled	14.6	44	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Cobalamin-independent methionine synthase
77	c3r6oA	Alignment	not modelled	14.3	30	PDB header: isomerase Chain: A: PDB Molecule: 2-hydroxyhepta-2,4-diene-1, 7-dioate isomerase; PDBTitle: crystal structure of a probable 2-hydroxyhepta-2,4-diene-1, 7-2 dioate isomerase from mycobacterium abscessus

78	d1zca1	Alignment	not modelled	14.1	23	Fold: TIM beta/alpha-barrel Superfamily: PLC-like phosphodiesterases Family: Glycerophosphoryl diester phosphodiesterase
79	c2aanA	Alignment	not modelled	13.9	17	PDB header: electron transport Chain: A: PDB Molecule: auracyanin a; PDBTitle: auracyanin a: a "blue" copper protein from the green thermophilic2 photosynthetic bacterium, chloroflexus aurantiacus
80	d2pyta1	Alignment	not modelled	13.7	13	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: EutQ-like
81	d1tygb	Alignment	not modelled	13.7	3	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoAD/ThiS Family: ThiS
82	d2bh1x1	Alignment	not modelled	13.5	13	Fold: Alpha-lytic protease prodomain-like Superfamily: EspE N-terminal domain-like Family: GSPII protein E N-terminal domain-like
83	c2bh1Y	Alignment	not modelled	13.5	13	PDB header: transport protein Chain: Y: PDB Molecule: general secretion pathway protein e.; PDBTitle: x-ray structure of the general secretion pathway complex of2 the n-terminal domain of epse and the cytosolic domain of3 epsl of vibrio cholerae
84	c3rlhA	Alignment	not modelled	13.4	13	PDB header: hydrolase Chain: A: PDB Molecule: sphingomyelin phosphodiesterase d lisi cto x-alpha1a; PDBTitle: crystal structure of a class ii phospholipase d from loxosceles2 intermedia venom
85	d1tkea1	Alignment	not modelled	13.3	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: TGS domain
86	d1nyra2	Alignment	not modelled	13.3	9	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: TGS domain
87	c2vgaA	Alignment	not modelled	13.2	17	PDB header: cell cycle Chain: A: PDB Molecule: dom34; PDBTitle: structure of yeast dom34 : a protein related to translation2 termination factor erf1 and involved in no-go decay.
88	c1kh2D	Alignment	not modelled	13.0	35	PDB header: ligase Chain: D: PDB Molecule: argininosuccinate synthetase; PDBTitle: crystal structure of thermus thermophilus hb82 argininosuccinate synthetase in complex with atp
89	c1tygG	Alignment	not modelled	12.8	0	PDB header: biosynthetic protein Chain: G: PDB Molecule: yjbs; PDBTitle: structure of the thiazole synthase/this complex
90	c3rpfB	Alignment	not modelled	12.8	13	PDB header: transferase Chain: B: PDB Molecule: molybdopterin synthase catalytic subunit; PDBTitle: protein-protein complex of subunit 1 and 2 of molybdopterin-converting2 factor from helicobacter pylori 26695
91	d1j20a1	Alignment	not modelled	12.5	35	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
92	c3hqxA	Alignment	not modelled	12.4	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0345 protein aciad0356; PDBTitle: crystal structure of protein of unknown function (duf1255,pf06865)2 from acinetobacter sp. adp1
93	d2oa4a1	Alignment	not modelled	12.4	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: TrpR-like Family: SPO1678-like
94	d1vl2a1	Alignment	not modelled	12.0	31	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
95	c2zpmA	Alignment	not modelled	12.0	18	PDB header: hydrolase Chain: A: PDB Molecule: regulator of sigma e protease; PDBTitle: crystal structure analysis of pdz domain b
96	c2x4iA	Alignment	not modelled	11.6	6	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein 114; PDBTitle: orf 114a from sulfolobus islandicus rudivirus 1
97	c3r7kB	Alignment	not modelled	11.6	13	PDB header: oxidoreductase Chain: B: PDB Molecule: probable acyl coa dehydrogenase; PDBTitle: crystal structure of a probable acyl coa dehydrogenase from2 mycobacterium abscessus atcc 19977 / dsm 44196
98	d1tt2a	Alignment	not modelled	11.5	19	Fold: OB-fold Superfamily: Staphylococcal nuclease Family: Staphylococcal nuclease
99	c3no3A	Alignment	not modelled	11.5	21	PDB header: hydrolase Chain: A: PDB Molecule: glycerophosphodiester phosphodiesterase; PDBTitle: crystal structure of a glycerophosphodiester phosphodiesterase2 (bdi_0402) from parabacteroides distasonis atcc 8503 at 1.89 a3 resolution