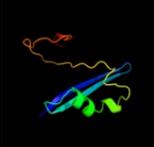
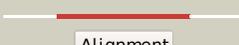
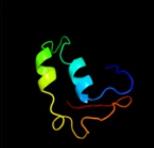
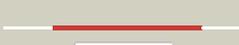
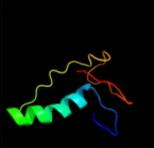
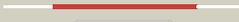
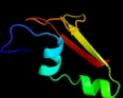
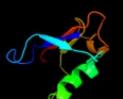
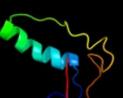
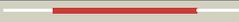
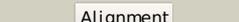
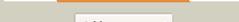


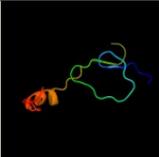
Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P52119
Date	Thu Jan 5 12:05:25 GMT 2012
Unique Job ID	eb245db961c269a8

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2hj1A_	 Alignment		100.0	52	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a 3d domain-swapped dimer of protein hi0395 from2 haemophilus influenzae
2	d2hj1a1	 Alignment		100.0	52	Fold: beta-Grasp (ubiquitin-like) Superfamily: Moad/ThiS Family: HI0395-like
3	c3hvvB_	 Alignment		97.3	17	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
4	c2kmmA_	 Alignment		97.1	24	PDB header: hydrolase Chain: A: PDB Molecule: guanosine-3',5'-bis(diphosphate) 3'- PDBTitle: solution nmr structure of the tgs domain of pg1808 from2 porphyromonas gingivalis. northeast structural genomics3 consortium target pgr122a (418-481)
5	c2ekiA_	 Alignment		96.8	20	PDB header: signaling protein Chain: A: PDB Molecule: developmentally-regulated gtp-binding protein 1; PDBTitle: solution structures of the tgs domain of human2 developmentally-regulated gtp-binding protein 1
6	d1vjka_	 Alignment		96.7	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: Moad/ThiS Family: Moad
7	d1zud21	 Alignment		96.6	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: Moad/ThiS Family: ThiS
8	d1wxqa2	 Alignment		96.5	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: G domain-linked domain
9	c2qieB_	 Alignment		96.0	21	PDB header: transferase Chain: B: PDB Molecule: molybdopterin synthase small subunit; PDBTitle: staphylococcus aureus molybdopterin synthase in complex2 with precursor z
10	c3po0A_	 Alignment		95.9	24	PDB header: protein binding Chain: A: PDB Molecule: small archaeal modifier protein 1; PDBTitle: crystal structure of samp1 from haloferax volcanii
11	d1tkea1	 Alignment		95.8	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: TGS domain

12	d1wgka_	 Alignment		94.9	16	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: C9orf74 homolog
13	c3cwiA_	 Alignment		94.8	23	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
14	c2qj1A_	 Alignment		94.5	14	PDB header: signaling protein Chain: A: PDB Molecule: ubiquitin-related modifier 1; PDBTitle: crystal structure of urm1
15	c2kl0A_	 Alignment		93.2	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative thiamin biosynthesis this; PDBTitle: solution nmr structure of rhodopseudomonas palustris rpa3574,2 northeast structural genomics consortium (nesg) target rpr325
16	c2g1eA_	 Alignment		93.1	17	PDB header: transferase Chain: A: PDB Molecule: hypothetical protein ta0895; PDBTitle: solution structure of ta0895
17	c2152A_	 Alignment		92.9	22	PDB header: protein binding Chain: A: PDB Molecule: methanosarcina acetivorans samp1 homolog; PDBTitle: solution structure of the small archaeal modifier protein 1 (samp1)2 from methanosarcina acetivorans
18	d1nyra2	 Alignment		92.8	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: TGS domain
19	d2cu3a1	 Alignment		92.7	27	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
20	d1tygb_	 Alignment		91.9	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
21	d1xo3a_	 Alignment	not modelled	91.5	18	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: C9orf74 homolog
22	d1fm0d_	 Alignment	not modelled	91.0	24	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: MoaD
23	c3dwmA_	 Alignment	not modelled	90.9	22	PDB header: transferase Chain: A: PDB Molecule: 9.5 kda culture filtrate antigen cfp10a; PDBTitle: crystal structure of mycobacterium tuberculosis cyso, an antigen
24	c3u7zA_	 Alignment	not modelled	89.8	17	PDB header: metal binding protein Chain: A: PDB Molecule: putative metal binding protein rumgna_00854; PDBTitle: crystal structure of a putative metal binding protein rumgna_008542 (zp_02040092.1) from ruminococcus gnavus atcc 29149 at 1.30 a3 resolution
25	c1tygG_	 Alignment	not modelled	89.1	23	PDB header: biosynthetic protein Chain: G: PDB Molecule: yjbs; PDBTitle: structure of the thiazole synthase/this complex
26	c2dwqB_	 Alignment	not modelled	89.0	16	PDB header: hydrolase Chain: B: PDB Molecule: gtp-binding protein; PDBTitle: thermus thermophilus ychf gtp-binding protein
27	d1v8ca1	 Alignment	not modelled	88.4	27	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: MoaD
28	c1wxqA_	 Alignment	not modelled	88.2	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: gtp-binding protein; PDBTitle: crystal structure of gtp binding protein from pyrococcus horikoshii2 ot3

29	c2k9xA	Alignment	not modelled	87.2	18	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of urm1 from trypanosoma brucei
30	d1rwsa	Alignment	not modelled	86.8	29	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
31	c1v8cA	Alignment	not modelled	86.4	27	PDB header: protein binding Chain: A: PDB Molecule: moad related protein; PDBTitle: crystal structure of moad related protein from thermus2 thermophilus hb8
32	c3rpfC	Alignment	not modelled	86.4	20	PDB header: transferase Chain: C: PDB Molecule: molybdopterin converting factor, subunit 1 (moad); PDBTitle: protein-protein complex of subunit 1 and 2 of molybdopterin-converting2 factor from helicobacter pylori 26695
33	c1jalA	Alignment	not modelled	84.0	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ychf protein; PDBTitle: ychf protein (hi0393)
34	c2ohfA	Alignment	not modelled	82.0	18	PDB header: hydrolase Chain: A: PDB Molecule: gtp-binding protein 9; PDBTitle: crystal structure of human ola1 in complex with amppcp
35	c1wwtA	Alignment	not modelled	81.3	20	PDB header: ligase Chain: A: PDB Molecule: threonyl-trna synthetase, cytoplasmic; PDBTitle: solution structure of the tgs domain from human threonyl-2 trna synthetase
36	c1dm9A	Alignment	not modelled	70.7	17	PDB header: structural genomics Chain: A: PDB Molecule: hypothetical 15.5 kd protein in mrca-pcka PDBTitle: heat shock protein 15 kd
37	d1dm9a	Alignment	not modelled	70.7	17	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: Heat shock protein 15 kd
38	c1ni3A	Alignment	not modelled	70.2	20	PDB header: hydrolase Chain: A: PDB Molecule: ychf gtp-binding protein; PDBTitle: structure of the schizosaccharomyces pombe ychf gtpase
39	c3kt9A	Alignment	not modelled	64.6	13	PDB header: hydrolase Chain: A: PDB Molecule: aprataxin; PDBTitle: aprataxin fha domain
40	c2eh0A	Alignment		64.0	13	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
41	d1czpa	Alignment	not modelled	59.5	9	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
42	c2k6pA	Alignment	not modelled	56.7	23	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized protein hp_1423; PDBTitle: solution structure of hypothetical protein, hp1423
43	c1yj5C	Alignment	not modelled	55.7	29	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
44	d2fy8a2	Alignment	not modelled	52.0	13	Fold: TrkA C-terminal domain-like Superfamily: TrkA C-terminal domain-like Family: TrkA C-terminal domain-like
45	c2bs2E	Alignment	not modelled	51.6	15	PDB header: oxidoreductase Chain: E: PDB Molecule: quinol-fumarate reductase iron-sulfur subunit b; PDBTitle: quinol:fumarate reductase from wolinnella succinogenes
46	d1frda	Alignment	not modelled	50.7	12	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
47	d1xr4a1	Alignment	not modelled	49.4	40	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
48	d1yjma1	Alignment	not modelled	49.0	28	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
49	c2wlbB	Alignment	not modelled	45.6	19	PDB header: electron transport Chain: B: PDB Molecule: electron transfer protein 1, mitochondrial; PDBTitle: adrenodoxin-like ferredoxin etp1fd(516-618) of2 schizosaccharomyces pombe mitochondria
50	d1offa	Alignment	not modelled	45.5	15	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
51	c3fm8A	Alignment	not modelled	45.5	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)
52	c1tkeA	Alignment	not modelled	44.2	9	PDB header: ligase Chain: A: PDB Molecule: threonyl-trna synthetase; PDBTitle: crystal structure of the editing domain of threonyl-trna2 synthetase complexed with serine
53	d2fug33	Alignment	not modelled	41.0	26	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
						Fold: Alpha-L RNA-binding motif

54	d1p9ka_	Alignment	not modelled	40.3	8	Superfamily: Alpha-L RNA-binding motif Family: Ybcj-like
55	d1krha3	Alignment	not modelled	38.4	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
56	d1pfda_	Alignment	not modelled	37.7	12	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
57	c3p42D_	Alignment	not modelled	37.6	10	PDB header: unknown function Chain: D: PDB Molecule: predicted protein; PDBTitle: structure of gfcc (ymcb), protein encoded by the e. coli group 42 capsule operon
58	d1doia_	Alignment	not modelled	37.2	32	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
59	c2e6zA_	Alignment	not modelled	37.0	36	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt5; PDBTitle: solution structure of the second kow motif of human2 transcription elongation factor spt5
60	d3c8ya2	Alignment	not modelled	36.5	15	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
61	d2cjoa_	Alignment	not modelled	34.6	12	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
62	c1c4cA_	Alignment	not modelled	34.4	15	PDB header: oxidoreductase Chain: A: PDB Molecule: protein (fe-only hydrogenase); PDBTitle: binding of exogenously added carbon monoxide at the active2 site of the fe-only hydrogenase (cpi) from clostridium3 pasteurianum
63	d1wlna1	Alignment	not modelled	34.4	8	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
64	d2bt6a1	Alignment	not modelled	33.1	12	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
65	d4fxca_	Alignment	not modelled	31.5	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
66	d2vbu1	Alignment	not modelled	30.8	40	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin kinase-like Family: CTP-dependent riboflavin kinase-like
67	d2g1la1	Alignment	not modelled	29.4	8	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
68	d1rp5a2	Alignment	not modelled	28.9	12	Fold: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Superfamily: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Family: Penicillin-binding protein 2x (pbp-2x), c-terminal domain
69	d1iuea_	Alignment	not modelled	28.6	6	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
70	c2fugC_	Alignment	not modelled	28.3	26	PDB header: oxidoreductase Chain: C: PDB Molecule: nadh-quinone oxidoreductase chain 3; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
71	c3l5aA_	Alignment	not modelled	28.2	15	PDB header: oxidoreductase Chain: A: PDB Molecule: nadh/flavin oxidoreductase/nadh oxidase; PDBTitle: crystal structure of a probable nadh-dependent flavin oxidoreductase2 from staphylococcus aureus
72	c3dh3C_	Alignment	not modelled	26.4	25	PDB header: isomerase/rna Chain: C: PDB Molecule: ribosomal large subunit pseudouridine synthase f; PDBTitle: crystal structure of rluf in complex with a 22 nucleotide2 rna substrate
73	d1awda_	Alignment	not modelled	26.0	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
74	d1i7ha_	Alignment	not modelled	25.6	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
75	c3gqsB_	Alignment	not modelled	25.3	19	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
76	d1yvca1	Alignment	not modelled	25.2	26	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: TRAM domain
77	d1ujxa_	Alignment	not modelled	23.9	24	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
78	c2bknA_	Alignment	not modelled	23.9	7	PDB header: membrane protein Chain: A: PDB Molecule: hypothetical protein ph0236; PDBTitle: structure analysis of unknown function protein
79	c3ah7A_	Alignment	not modelled	23.7	15	PDB header: metal binding protein Chain: A: PDB Molecule: [2fe-2s]ferredoxin; PDBTitle: crystal structure of the isc-like [2fe-2s] ferredoxin (fdxb) from2 pseudomonas putida jcm 20004
80	d2affa1	Alignment	not modelled	22.9	15	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain

						Family:FHA domain
81	d1frfa_	Alignment	not modelled	22.8	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
82	d2jioa1	Alignment	not modelled	22.7	25	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
83	d1fxia_	Alignment	not modelled	22.6	15	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
84	d1vioa2	Alignment	not modelled	22.3	15	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: Pseudouridine synthase RsaA N-terminal domain
85	d1e0za_	Alignment	not modelled	22.2	32	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
86	d2brfa1	Alignment	not modelled	21.4	21	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
87	d1jq4a_	Alignment	not modelled	21.1	14	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
88	d1vyra_	Alignment	not modelled	20.6	31	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
89	c3lzkC_	Alignment	not modelled	20.5	44	PDB header: hydrolase Chain: C: PDB Molecule: fumarylacetoacetate hydrolase family protein; PDBTitle: the crystal structure of a probably aromatic amino acid2 degradation protein from sinorhizobium meliloti 1021
90	d1iyjb4	Alignment	not modelled	19.7	26	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
91	d2iv2x1	Alignment	not modelled	18.5	17	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Formate dehydrogenase/DMSO reductase, C-terminal domain
92	d2ff4a3	Alignment	not modelled	18.2	22	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
93	d1uhta_	Alignment	not modelled	17.5	25	Fold: SMAD/FHA domain Superfamily: SMAD/FHA domain Family: FHA domain
94	d2f06a1	Alignment	not modelled	17.2	8	Fold: Ferredoxin-like Superfamily: ACT-like Family: BT0572-like
95	d1k25a2	Alignment	not modelled	17.2	11	Fold: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Superfamily: Penicillin-binding protein 2x (pbp-2x), c-terminal domain Family: Penicillin-binding protein 2x (pbp-2x), c-terminal domain
96	d2q1ma1	Alignment	not modelled	17.0	36	Fold: TNF-like Superfamily: TNF-like Family: TNF-like
97	d1i94q_	Alignment	not modelled	16.7	42	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
98	d1t0ya_	Alignment	not modelled	16.3	10	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ubiquitin-related
99	c1t0yA_	Alignment	not modelled	16.3	10	PDB header: chaperone Chain: A: PDB Molecule: tubulin folding cofactor b; PDBTitle: solution structure of a ubiquitin-like domain from tubulin-2 binding cofactor b