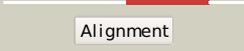
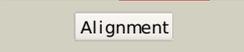
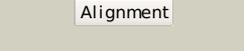
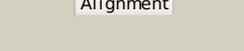
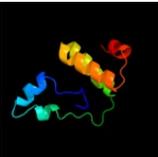
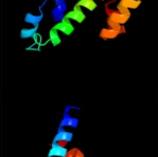
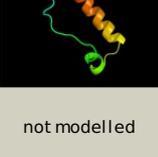


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P76035
Date	Thu Jan 5 12:17:35 GMT 2012
Unique Job ID	d0c3aabe2921c81e

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2prra1	 Alignment		100.0	16	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
2	d2pfxa1	 Alignment		100.0	13	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
3	c3c1lB_	 Alignment		100.0	15	PDB header: oxidoreductase Chain: B: PDB Molecule: putative antioxidant defense protein mlr4105; PDBTitle: crystal structure of an antioxidant defense protein (mlr4105) from2 mesorhizobium loti maff303099 at 2.00 a resolution
4	c3lvyB_	 Alignment		100.0	14	PDB header: lyase Chain: B: PDB Molecule: carboxymuconolactone decarboxylase family; PDBTitle: crystal structure of carboxymuconolactone decarboxylase2 family protein smu.961 from streptococcus mutans
5	d2oyoal	 Alignment		100.0	19	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
6	d2o4da1	 Alignment		100.0	16	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
7	d2gmya1	 Alignment		100.0	16	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
8	d2ouwa1	 Alignment		99.7	18	Fold: AhpD-like Superfamily: AhpD-like Family: TTHA0727-like
9	c3beyC_	 Alignment		99.0	12	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: conserved protein o27018; PDBTitle: crystal structure of the protein o27018 from methanobacterium2 thermoautotrophicum. northeast structural genomics consortium target3 tt217
10	d1vkea_	 Alignment		98.9	11	Fold: AhpD-like Superfamily: AhpD-like Family: CMD-like
11	c1p8cD_	 Alignment		98.9	10	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of tm1620 (apc4843) from thermotoga2 maritima

12	c2qeuA	Alignment		98.9	12	PDB header: lyase Chain: A: PDB Molecule: putative carboxymuconolactone decarboxylase; PDBTitle: crystal structure of putative carboxymuconolactone decarboxylase2 (yp_555818.1) from burkholderia xenovorans lb400 at 1.65 a resolution
13	d1knca	Alignment		98.8	13	Fold: AhpD-like Superfamily: AhpD-like Family: AhpD
14	c3d7iB	Alignment		98.6	12	PDB header: lyase Chain: B: PDB Molecule: carboxymuconolactone decarboxylase family protein; PDBTitle: crystal structure of carboxymuconolactone decarboxylase family protein2 possibly involved in oxygen detoxification (1591455) from3 methanococcus jannaschii at 1.75 a resolution
15	d2q0ta1	Alignment		98.5	12	Fold: AhpD-like Superfamily: AhpD-like Family: AhpD
16	d2cwqa1	Alignment		98.4	16	Fold: AhpD-like Superfamily: AhpD-like Family: TTHA0727-like
17	d1vkeb	Alignment		98.3	7	Fold: AhpD-like Superfamily: AhpD-like Family: CMD-like
18	d2af7a1	Alignment		96.6	7	Fold: AhpD-like Superfamily: AhpD-like Family: CMD-like
19	d1a9xa1	Alignment		92.1	9	Fold: Carbamoyl phosphate synthetase, large subunit connection domain Superfamily: Carbamoyl phosphate synthetase, large subunit connection domain Family: Carbamoyl phosphate synthetase, large subunit connection domain
20	c3bjxB	Alignment		68.5	13	PDB header: hydrolase Chain: B: PDB Molecule: halocarboxylic acid dehalogenase dehi; PDBTitle: structure of a group i haloacid dehalogenase from2 pseudomonas putida strain pp3
21	c3cixA	Alignment	not modelled	54.4	11	PDB header: adomet binding protein Chain: A: PDB Molecule: feFe-hydrogenase maturase; PDBTitle: x-ray structure of the [feFe]-hydrogenase maturase hyde from2 thermotoga maritima in complex with thiocyanate
22	c3iwfA	Alignment	not modelled	41.4	16	PDB header: transcription regulator Chain: A: PDB Molecule: transcription regulator rpri family; PDBTitle: the crystal structure of the n-terminal domain of a rpri2 transcriptional regulator from staphylococcus epidermidis to 1.4a
23	d2a1ka1	Alignment	not modelled	39.9	43	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Phage ssDNA-binding proteins
24	c3omdB	Alignment	not modelled	39.4	7	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of unknown function protein from leptospirillum2 rubarum
25	d1bkra	Alignment	not modelled	38.9	25	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
26	c2d87A	Alignment	not modelled	38.2	15	PDB header: structural protein, protein binding Chain: A: PDB Molecule: smoothelin splice isoform I2; PDBTitle: solution structure of the ch domain from human smoothelin2 splice isoform I2
27	c1m6vE	Alignment	not modelled	36.3	9	PDB header: ligase Chain: E: PDB Molecule: carbamoyl phosphate synthetase large chain; PDBTitle: crystal structure of the g359f (small subunit) point mutant of2 carbamoyl phosphate synthetase
28	c2vn2B	Alignment	not modelled	35.9	20	PDB header: replication Chain: B: PDB Molecule: chromosome replication initiation protein; PDBTitle: crystal structure of the n-terminal domain of dnad

						protein2 from geobacillus kaustophilus hta426
29	d1gpca	Alignment	not modelled	33.7	43	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Phage ssDNA-binding proteins
30	c2d89A	Alignment	not modelled	31.6	18	PDB header: structural protein, protein binding Chain: A: PDB Molecule: ehbp1 protein; PDBTitle: solution structure of the ch domain from human eh domain2 binding protein 1
31	c2krkA	Alignment	not modelled	31.4	16	PDB header: protein binding Chain: A: PDB Molecule: 26s protease regulatory subunit 8; PDBTitle: solution nmr structure of 26s protease regulatory subunit 82 from h.sapiens, northeast structural genomics consortium3 target target hr3102a
32	c1wylA	Alignment	not modelled	30.5	30	PDB header: signaling protein Chain: A: PDB Molecule: nedd9 interacting protein with calponin homology PDBTitle: solution structure of the ch domain of human nedd92 interacting protein with calponin homology and lim domains
33	c3mhvC	Alignment	not modelled	28.6	13	PDB header: protein transport Chain: C: PDB Molecule: vacuolar protein sorting-associated protein 4; PDBTitle: crystal structure of vps4 and vta1
34	c3rmsA	Alignment	not modelled	26.8	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of uncharacterized protein svir_20580 from2 saccharomonospora viridis
35	d1t3wa	Alignment	not modelled	24.7	15	Fold: DNA primase DnaG, C-terminal domain Superfamily: DNA primase DnaG, C-terminal domain Family: DNA primase DnaG, C-terminal domain
36	d2csba4	Alignment	not modelled	23.0	29	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Topoisomerase V repeat domain
37	d1t33a2	Alignment	not modelled	22.9	10	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
38	c1wr1B	Alignment	not modelled	22.7	20	PDB header: signaling protein Chain: B: PDB Molecule: ubiquitin-like protein dsk2; PDBTitle: the complex strcture of dsk2p uba with ubiquitin
39	c2dt7A	Alignment	not modelled	20.5	36	PDB header: rna binding protein Chain: A: PDB Molecule: splicing factor 3a subunit 3; PDBTitle: solution structure of the second surp domain of human2 splicing factor sf3a120 in complex with a fragment of3 human splicing factor sf3a60
40	c2v79B	Alignment	not modelled	20.3	20	PDB header: dna-binding protein Chain: B: PDB Molecule: dna replication protein dnad; PDBTitle: crystal structure of the n-terminal domain of dnad from2 bacillus subtilis
41	c1t3ba	Alignment	not modelled	20.2	11	PDB header: isomerase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbc; PDBTitle: x-ray structure of dsbc from haemophilus influenzae
42	c3n7qA	Alignment	not modelled	19.1	19	PDB header: transcription, replication/dna Chain: A: PDB Molecule: transcription termination factor, mitochondrial; PDBTitle: crystal structure of human mitochondrial mterf fragment (aa 99-399) in2 complex with a 12-mer dna encompassing the trnaleu(uur) binding3 sequence
43	d1sh5a2	Alignment	not modelled	18.8	28	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
44	c3l9vE	Alignment	not modelled	18.7	33	PDB header: oxidoreductase Chain: E: PDB Molecule: putative thiol-disulfide isomerase or thioredoxin; PDBTitle: crystal structure of salmonella enterica serovar typhi murium srga
45	c3dvvA	Alignment	not modelled	18.5	22	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsba; PDBTitle: crystal structure of reduced dsba1 from neisseria2 meningitidis
46	c2rcyB	Alignment	not modelled	18.1	12	PDB header: oxidoreductase Chain: B: PDB Molecule: pyrroline carboxylate reductase; PDBTitle: crystal structure of plasmodium falci parum pyrroline carboxylate2 reductase (mal13p1.284) with nadp bound
47	c2d88A	Alignment	not modelled	18.0	13	PDB header: signaling protein, protein binding Chain: A: PDB Molecule: protein mical-3; PDBTitle: solution structure of the ch domain from human mical-32 protein
48	d1bhda	Alignment	not modelled	17.5	25	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
49	c3bj4B	Alignment	not modelled	17.0	41	PDB header: signaling protein Chain: B: PDB Molecule: potassium voltage-gated channel subfamily kqt PDBTitle: the kcnq1 (kv7.1) c-terminus, a multi-tiered scaffold for2 subunit assembly and protein interaction
50	c3l9cA	Alignment	not modelled	16.9	25	PDB header: unknown function Chain: A: PDB Molecule: glutaredoxin 1; PDBTitle: crystal structure of glutaredoxin 1 from francisella2 tularensis
51	d1sxd1	Alignment	not modelled	15.8	11	Fold: post-AAA+ oligomerization domain-like Superfamily: post-AAA+ oligomerization domain-like Family: DNA polymerase III clamp loader subunits, C-terminal domain
52	c1v57A	Alignment	not modelled	15.8	18	PDB header: isomerase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbg; PDBTitle: crystal structure of the disulfide bond isomerase dsbg
53	c2hd5A	Alignment	not modelled	15.1	11	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsba;

53	c3ru3A	Alignment	not modelled	13.1	11	PDBTitle: crystal structure of a thiol:disulfide interchange protein2 dsba from bordetella parapertussis PDB header: structural genomics, unknown function Chain: A: PDB Molecule: disulfide interchange protein; PDBTitle: crystal structure of disulfide interchange protein from neisseria2 gonorrhoeae
54	c3gv1A	Alignment	not modelled	15.0	22	PDB header: signaling protein Chain: A: PDB Molecule: ubiquilin-1; PDBTitle: nmr structure of ubiquilin 1 uba domain
55	c2jy5A	Alignment	not modelled	14.7	13	Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG
56	d2ccaa1	Alignment	not modelled	14.5	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
57	d1xcca	Alignment	not modelled	14.5	25	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: DsbC/DsbG C-terminal domain-like
58	d1t3ba1	Alignment	not modelled	14.3	10	PDB header: oxidoreductase Chain: B: PDB Molecule: disulfide oxidoreductase; PDBTitle: crystal structure of oxidoreductase dsba from xylella2 fastidiosa
59	c2remB	Alignment	not modelled	13.8	22	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
60	d1m3va1	Alignment	not modelled	13.7	56	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
61	d1rt8a	Alignment	not modelled	13.7	23	PDB header: dna binding protein/toxin Chain: D: PDB Molecule: motility quorum-sensing regulator mqsr; PDBTitle: structure of the n-terminal domain of the e. coli antitoxin mqsA2 (ygiT/b3021) in complex with the e. coli toxin mqsR (ygiU/b3022)
62	c3hi2D	Alignment	not modelled	13.6	11	PDB header: oxidoreductase Chain: C: PDB Molecule: 27kda outer membrane protein; PDBTitle: the crystal structure of a thioredoxin-like oxidoreductase from2 silicibacter pomeroyi dss-3
63	c3gykC	Alignment	not modelled	13.1	14	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbc; PDBTitle: dsbc-dsbdalpha complex
64	c1jzdA	Alignment	not modelled	13.0	0	PDB header: oxidoreductase Chain: A: PDB Molecule: ascorbate peroxidase; PDBTitle: the crystal structure of leishmania major peroxidase mutant c197t
65	c3riwA	Alignment	not modelled	12.8	15	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: DsbC/DsbG C-terminal domain-like
66	d1eeja1	Alignment	not modelled	12.3	11	PDB header: metal binding protein Chain: A: PDB Molecule: glycoprotein; PDBTitle: the hantavirus glycoprotein g1 tail contains a dual cchc-2 type classical zinc fingers
67	c2k9hA	Alignment	not modelled	12.1	35	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
68	d2vkva2	Alignment	not modelled	11.8	10	PDB header: oxidoreductase Chain: A: PDB Molecule: disulfide bond formation protein d; PDBTitle: crystal structure of etda-treated bdbd (reduced)
69	c3ghaA	Alignment	not modelled	11.7	19	PDB header: oxidoreductase Chain: B: PDB Molecule: thiol:disulfide interchange protein dsba-like; PDBTitle: crystal structure of reduced dsbl
70	c3c7mB	Alignment	not modelled	11.6	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
71	d1prxa	Alignment	not modelled	11.4	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: RpiR-like
72	d2o3fa1	Alignment	not modelled	11.4	17	PDB header: oxidoreductase Chain: A: PDB Molecule: putative lipoprotein; PDBTitle: crystal structure of dsba-like thioredoxin domain vf_a0457 from vibrio2 fischeri
73	c3feuA	Alignment	not modelled	11.3	11	Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: CCP-like
74	d2euta1	Alignment	not modelled	11.2	7	PDB header: oxidoreductase Chain: C: PDB Molecule: peroxiredoxin 6; PDBTitle: crystal structure of the c45s mutant of the peroxiredoxin 62 of arenicola marina. monoclinic form
75	c2v2gC	Alignment	not modelled	11.2	29	PDB header: protein binding Chain: A: PDB Molecule: protein bim1; PDBTitle: structural basis of microtubule plus end tracking by2 xmap215, clip-170 and eb1
76	c2qjxA	Alignment	not modelled	11.0	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Replication initiation protein
77	d1repc1	Alignment	not modelled	10.7	11	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
78	d1pxya	Alignment	not modelled	10.6	19	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
79	d1j2oa1	Alignment	not modelled	10.5	22	PDB header: oxidoreductase

80	c3mk7B_	Alignment	not modelled	10.5	33	Chain: B: PDB Molecule: cytochrome c oxidase, cbb3-type, subunit 0; PDBTitle: the structure of cbb3 cytochrome oxidase
81	c3bcIA_	Alignment	not modelled	10.5	13	PDB header: oxidoreductase Chain: A: PDB Molecule: disulfide bond protein a; PDBTitle: crystal structure of staphylococcus aureus dsba
82	d2zcta1	Alignment	not modelled	10.3	15	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
83	c2o3fC_	Alignment	not modelled	10.1	17	PDB header: transcription Chain: C: PDB Molecule: putative hth-type transcriptional regulator ybbh; PDBTitle: structural genomics, the crystal structure of the n-2 terminal domain of the putative transcriptional regulator3 ybbh from bacillus subtilis subsp. subtilis str. 168.
84	d1un2a_	Alignment	not modelled	10.1	22	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: DsbA-like
85	d1ehsa_	Alignment	not modelled	10.0	50	Fold: Toxic hairpin Superfamily: Heat-stable enterotoxin B Family: Heat-stable enterotoxin B
86	d1dxa2	Alignment	not modelled	9.8	25	Fold: CH domain-like Superfamily: Calponin-homology domain, CH-domain Family: Calponin-homology domain, CH-domain
87	c3gmfA_	Alignment	not modelled	9.8	20	PDB header: oxidoreductase Chain: A: PDB Molecule: protein-disulfide isomerase; PDBTitle: crystal structure of protein-disulfide isomerase from novosphingobium2 aromaticivorans
88	d2daha1	Alignment	not modelled	9.1	13	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: UBA domain
89	d2e39a1	Alignment	not modelled	9.0	15	Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: CCP-like
90	d1oqya2	Alignment	not modelled	8.9	9	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: UBA domain
91	d1rutx1	Alignment	not modelled	8.9	63	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
92	d2bwba1	Alignment	not modelled	8.9	14	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: UBA domain
93	d1h75a_	Alignment	not modelled	8.7	31	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
94	c1g6uB_	Alignment	not modelled	8.7	15	PDB header: de novo protein Chain: B: PDB Molecule: domain swapped dimer; PDBTitle: crystal structure of a domain swapped dimer
95	d1mwva1	Alignment	not modelled	8.7	15	Fold: Heme-dependent peroxidases Superfamily: Heme-dependent peroxidases Family: Catalase-peroxidase KatG
96	d1fova_	Alignment	not modelled	8.6	19	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
97	c3nznA_	Alignment	not modelled	8.5	13	PDB header: oxidoreductase Chain: A: PDB Molecule: glutaredoxin; PDBTitle: the crystal structure of the glutaredoxin from methanosarcina mazei2 go1
98	c1nm3B_	Alignment	not modelled	8.4	23	PDB header: electron transport Chain: B: PDB Molecule: protein hi0572; PDBTitle: crystal structure of heamophilus influenza hybrid-prx5
99	c2agaA_	Alignment	not modelled	8.3	33	PDB header: transcription Chain: A: PDB Molecule: machado-joseph disease protein 1; PDBTitle: de-ubiquitinating function of ataxin-3: insights from the2 solution structure of the josephin domain