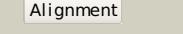
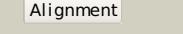
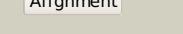


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P24238
Date	Thu Jan 5 11:41:30 GMT 2012
Unique Job ID	487b86ac62c4039b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2if6a1	Alignment		100.0	25	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: YiiX-like
2	c3kw0D_	Alignment		100.0	21	PDB header: hydrolase Chain: D: PDB Molecule: cysteine peptidase; PDBTitle: crystal structure of cysteine peptidase (np_982244.1) from bacillus2 cereus atcc 10987 at 2.50 a resolution
3	c2p1gA_	Alignment		98.1	23	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative xylanase; PDBTitle: crystal structure of a putative xylanase from bacteroides fragilis
4	c3h41A_	Alignment		97.5	19	PDB header: hydrolase Chain: A: PDB Molecule: nlp/p60 family protein; PDBTitle: crystal structure of a nlp/p60 family protein (bce_2878) from2 bacillus cereus atcc 10987 at 1.79 a resolution
5	c2k1gA_	Alignment		97.5	22	PDB header: lipoprotein Chain: A: PDB Molecule: lipoprotein spr; PDBTitle: solution nmr structure of lipoprotein spr from escherichia coli k12.2 northeast structural genomics target er541-37-162
6	c2kytA_	Alignment		97.3	16	PDB header: hydrolase Chain: A: PDB Molecule: group xvi phospholipase a2; PDBTitle: solution struture of the h-rev107 n-terminal domain
7	c2fg0B_	Alignment		97.3	27	PDB header: hydrolase Chain: B: PDB Molecule: cog0791: cell wall-associated hydrolases (invasion- PDBTitle: crystal structure of a putative gamma-d-glutamyl-l-diamino acid2 endopeptidase (npu_n_r0659) from nostoc punctiforme pcc 73102 at 1.793 a resolution
8	d2evra2	Alignment		97.2	26	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: NlpC/P60
9	c2im9A_	Alignment		97.0	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of protein lpg0564 from legionella pneumophila str.2 philadelphia 1, pfam duf1460
10	d2im9a1	Alignment		97.0	13	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Lpg0564-like
11	c3gt2A_	Alignment		97.0	10	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of the p60 domain from m. avium2 paratuberculosis antigen map1272c

12	c2xiva			96.7	18	PDB header: structural protein Chain: A: PDB Molecule: hypothetical invasion protein; PDBTitle: structure of rv1477, hypothetical invasion protein of2 mycobacterium tuberculosis
13	c3i86a			96.7	12	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of the p60 domain from m. avium subspecies2 paratuberculosis antigen map1204
14	c3pb1a			96.5	16	PDB header: hydrolase Chain: A: PDB Molecule: invasion protein; PDBTitle: structure of the peptidoglycan hydrolase ripb (rv1478) from2 mycobacterium tuberculosis at 1.6 resolution
15	c3npfB			96.1	16	PDB header: hydrolase Chain: B: PDB Molecule: putative dipeptidyl-peptidase vi; PDBTitle: crystal structure of a putative dipeptidyl-peptidase vi (bacova_00612)2 from bacteroides ovatus at 1.72 a resolution
16	d2lo8a2			93.0	25	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: CHAP domain
17	c3m1uB			91.0	19	PDB header: hydrolase Chain: B: PDB Molecule: putative gamma-d-glutamyl-l-diamino acid endopeptidase; PDBTitle: crystal structure of a putative gamma-d-glutamyl-l-diamino acid2 endopeptidase (dvu_0896) from desulfovibrio vulgaris hildenborough at3 1.75 a resolution
18	c2vpmB			83.5	24	PDB header: ligase Chain: B: PDB Molecule: trypanothione synthetase; PDBTitle: trypanothione synthetase
19	c2ioaA			83.1	26	PDB header: ligase, hydrolase Chain: A: PDB Molecule: bifunctional glutathionylspermidine PDBTitle: e. coli bifunctional glutathionylspermidine2 synthetase/amidase incomplex with mg2+ and adp and3 phosphinate inhibitor
20	c2k3aA			66.9	26	PDB header: hydrolase Chain: A: PDB Molecule: chap domain protein; PDBTitle: nmr solution structure of staphylococcus saprophyticus chap2 (cysteine, histidine-dependent amidohydrolases/peptidases)3 domain protein. northeast structural genomics consortium4 target syr1
21	d1wh7a		not modelled	44.2	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
22	d1ligna2		not modelled	41.0	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: DNA-binding domain of rap1
23	d1wfza		not modelled	29.0	35	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
24	c3nnlB		not modelled	27.2	33	PDB header: biosynthetic protein Chain: B: PDB Molecule: cura; PDBTitle: halogenase domain from cura module (crystal form iii)
25	c2z7eb		not modelled	25.4	12	PDB header: biosynthetic protein Chain: B: PDB Molecule: nifu-like protein; PDBTitle: crystal structure of aquifex aeolicus iscu with bound [2fe-2 s] cluster
26	d2glza1		not modelled	22.5	10	Fold: FwdE/GAPDH domain-like Superfamily: FwdE-like Family: FwdE-like
27	d2gy9q1		not modelled	19.3	30	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
28	d1hkva1		not modelled	18.0	20	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
29	d1wpa2		not modelled	17.1	15	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases

29	d1vbg2	Alignment	not modelled	17.1	13	Family: Manganese-dependent inorganic pyrophosphatase (family II)
30	d1vbg2	Alignment	not modelled	15.4	13	Fold: The "swivelling" beta/beta/alpha domain Superfamily: Phosphohistidine domain Family: Pyruvate phosphate dikinase, central domain
31	c1khia	Alignment	not modelled	15.2	15	PDB header: structural protein Chain: A: PDB Molecule: hex1; PDBTitle: crystal structure of hex1
32	d1h2ka	Alignment	not modelled	14.7	24	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Hypoxia-inducible factor HIF ihhibitor (FIH1)
33	d2z1ea2	Alignment	not modelled	14.7	24	Fold: PurM C-terminal domain-like Superfamily: PurM C-terminal domain-like Family: PurM C-terminal domain-like
34	c2zkqq	Alignment	not modelled	14.2	30	PDB header: ribosomal protein/rna Chain: Q: PDB Molecule: PDBTitle: structure of a mammalian ribosomal 40s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
35	d1khia1	Alignment	not modelled	13.5	15	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: eIF5a N-terminal domain-like
36	d1zyma2	Alignment	not modelled	13.3	14	Fold: The "swivelling" beta/beta/alpha domain Superfamily: Phosphohistidine domain Family: N-terminal domain of enzyme I of the PEP:sugar phosphotransferase system
37	c3bbnQ	Alignment	not modelled	13.3	15	PDB header: ribosome Chain: Q: PDB Molecule: ribosomal protein s17; PDBTitle: homology model for the spinach chloroplast 30s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome.
38	c3zvmA	Alignment	not modelled	13.0	19	PDB header: hydrolase/transferase/dna Chain: A: PDB Molecule: bifunctional polynucleotide phosphatase/kinase; PDBTitle: the structural basis for substrate recognition by mammalian2 polynucleotide kinase 3' phosphatase
39	d1r9pa	Alignment	not modelled	12.7	29	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
40	c2obnA	Alignment	not modelled	12.6	19	PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a duf1611 family protein (ava_3511) from anabaena2 variabilis atcc 29413 at 2.30 a resolution
41	d1k20a	Alignment	not modelled	12.4	26	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)
42	d1asua	Alignment	not modelled	12.4	14	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Retroviral integrase, catalytic domain
43	c3k1rA	Alignment	not modelled	12.1	19	PDB header: structural protein Chain: A: PDB Molecule: harmonin; PDBTitle: structure of harmonin npdz1 in complex with the sam-pbm of2 sans
44	d1kbla2	Alignment	not modelled	11.8	13	Fold: The "swivelling" beta/beta/alpha domain Superfamily: Phosphohistidine domain Family: Pyruvate phosphate dikinase, central domain
45	c1s1hQ	Alignment	not modelled	11.6	20	PDB header: ribosome Chain: Q: PDB Molecule: 40s ribosomal protein s11; PDBTitle: structure of the ribosomal 80s-eef2-sordarin complex from2 yeast obtained by docking atomic models for rna and protein3 components into a 11.7 a cryo-em map. this file, 1s1h,4 contains 40s subunit. the 60s ribosomal subunit is in file5 1s1i.
46	c3k2oB	Alignment	not modelled	11.6	41	PDB header: oxidoreductase Chain: B: PDB Molecule: bifunctional arginine demethylase and lysyl-hydroxylase PDBTitle: structure of an oxygenase
47	d1h6za2	Alignment	not modelled	11.6	13	Fold: The "swivelling" beta/beta/alpha domain Superfamily: Phosphohistidine domain Family: Pyruvate phosphate dikinase, central domain
48	c2x35A	Alignment	not modelled	11.5	13	PDB header: transcription Chain: A: PDB Molecule: peregrin; PDBTitle: molecular basis of histone h3k36me3 recognition by the pwwp2 domain of brpf1.
49	c2zpmA	Alignment	not modelled	11.3	16	PDB header: hydrolase Chain: A: PDB Molecule: regulator of sigma e protease; PDBTitle: crystal structure analysis of pdz domain b
50	d1xjsa	Alignment	not modelled	11.3	12	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
51	c2opwA	Alignment	not modelled	11.0	9	PDB header: oxidoreductase Chain: A: PDB Molecule: phyhd1 protein; PDBTitle: crystal structure of human phytanoyl-coa dioxygenase phyhd1 (apo)
52	d2qamc2	Alignment	not modelled	10.8	28	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
53	d1rl2a2	Alignment	not modelled	10.7	17	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
54	c1zx6A	Alignment	not modelled	10.5	17	PDB header: protein binding Chain: A: PDB Molecule: ypr154wp; PDBTitle: high-resolution crystal structure of yeast pin3 sh3 domain
						Fold: OB-fold

55	d2uubq1	Alignment	not modelled	10.3	20	Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
56	d1vcta2	Alignment	not modelled	10.2	8	Fold: TrkA C-terminal domain-like Superfamily: TrkA C-terminal domain-like Family: TrkA C-terminal domain-like
57	d2hawa1	Alignment	not modelled	9.8	15	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)
58	d1su0b_	Alignment	not modelled	9.5	35	Fold: SufE/NifU Superfamily: SufE/NifU Family: NifU/IscU domain
59	d1i94q_	Alignment	not modelled	9.3	20	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
60	c1ezaA_	Alignment	not modelled	9.0	12	PDB header: phosphotransferase Chain: A: PDB Molecule: enzyme i; PDBTitle: amino terminal domain of enzyme i from escherichia coli nmr,2 restrained regularized mean structure
61	d2f4pa1	Alignment	not modelled	9.0	18	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
62	d1ripa_	Alignment	not modelled	8.8	30	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
63	c2wkdA_	Alignment	not modelled	8.7	27	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
64	d2fcta1	Alignment	not modelled	8.7	13	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: PhyH-like
65	d2hg6a1	Alignment	not modelled	8.6	50	Fold: PA1123-like Superfamily: PA1123-like Family: PA1123-like
66	d1i74a_	Alignment	not modelled	8.3	28	Fold: DHH phosphoesterases Superfamily: DHH phosphoesterases Family: Manganese-dependent inorganic pyrophosphatase (family II)
67	c3mt1B_	Alignment	not modelled	8.2	15	PDB header: lyase Chain: B: PDB Molecule: putative carboxynorspermidine decarboxylase protein; PDBTitle: crystal structure of putative carboxynorspermidine decarboxylase2 protein from sinorhizobium meliloti
68	d1ntha_	Alignment	not modelled	8.1	10	Fold: TIM beta/alpha-barrel Superfamily: Monomethylamine methyltransferase MtMB Family: Monomethylamine methyltransferase MtMB
69	d1vrba1	Alignment	not modelled	8.0	6	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Asparaginyl hydroxylase-like
70	d2nlua1	Alignment	not modelled	8.0	38	Fold: SH3-like barrel Superfamily: Tudor/PWWP/MBT Family: PWWP domain
71	d2zoda2	Alignment	not modelled	8.0	6	Fold: PurM C-terminal domain-like Superfamily: PurM C-terminal domain-like Family: PurM C-terminal domain-like
72	d1hyoa2	Alignment	not modelled	7.6	17	Fold: FAH Superfamily: FAH Family: FAH
73	d1wpga1	Alignment	not modelled	7.4	28	Fold: Double-stranded beta-helix Superfamily: Calcium ATPase, transduction domain A Family: Calcium ATPase, transduction domain A
74	c3al6A_	Alignment	not modelled	7.3	41	PDB header: unknown function Chain: A: PDB Molecule: jnjc domain-containing protein c2orf60; PDBTitle: crystal structure of human tyw5
75	c1nhgD_	Alignment	not modelled	7.2	9	PDB header: oxidoreductase Chain: D: PDB Molecule: enoyl-acyl carrier reductase; PDBTitle: crystal structure analysis of plasmodium falciparum enoyl-2 acyl-carrier-protein reductase with triclosan
76	d1fc6a3	Alignment	not modelled	7.2	30	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: Tail specific protease PDZ domain
77	c1yj5B_	Alignment	not modelled	7.1	19	PDB header: transferase Chain: B: PDB Molecule: 5' polynucleotide kinase-3' phosphatase catalytic domain; PDBTitle: molecular architecture of mammalian polynucleotide kinase, a dna2 repair enzyme
78	c2yy8B_	Alignment	not modelled	7.0	12	PDB header: transferase Chain: B: PDB Molecule: upf0106 protein ph0461; PDBTitle: crystal structure of archaeal tRNA-methylase for position 256 (atrm56) from pyrococcus horikoshii, complexed with s-3 adenosyl-l-methionine
79	d1sota1	Alignment	not modelled	6.9	18	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: HtrA-like serine proteases
80	d1h3za_	Alignment	not modelled	6.9	25	Fold: SH3-like barrel Superfamily: Tudor/PWWP/MBT Family: PWWP domain
81	d1cz5a1	Alignment	not modelled	6.8	38	Fold: Double psi beta-barrel Superfamily: ADC-like

					Family: Cdc48 N-terminal domain-like
82	d1knwa1	Alignment	not modelled	6.8	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
83	c1i7oC	Alignment	not modelled	6.8	PDB header: isomerase, lyase Chain: C; PDB Molecule: 4-hydroxyphenylacetate degradation bifunctional PDBTitle: crystal structure of hpce
84	d1d7ka1	Alignment	not modelled	6.7	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
85	c2hc8A	Alignment	not modelled	6.6	PDB header: transport protein Chain: A; PDB Molecule: cation-transporting atpase, p-type; PDBTitle: structure of the a. fulgidus copa a-domain
86	c4a1b0	Alignment	not modelled	6.5	PDB header: ribosome Chain: O; PDB Molecule: rpl28; PDBTitle: t thermophila 60s ribosomal subunit in complex with initiation factor 6. this file contains 26s rrna and3 proteins of molecule 3.
87	c2p3wB	Alignment	not modelled	6.4	PDB header: protein binding Chain: B; PDB Molecule: probable serine protease htr4; PDBTitle: crystal structure of the htr4 pdz domain bound to a phage-derived2 ligand (fgrvw)
88	c3c9qA	Alignment	not modelled	6.4	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein c8orf32; PDBTitle: crystal structure of the uncharacterized human protein c8orf32 with2 bound peptide
89	d1l0wa2	Alignment	not modelled	6.2	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
90	c3d3rA	Alignment	not modelled	6.1	PDB header: chaperone Chain: A; PDB Molecule: hydrogenase assembly chaperone hypc/hupf; PDBTitle: crystal structure of the hydrogenase assembly chaperone hypc/hupf2 family protein from shewanella oneidensis mr-1
91	d1clia2	Alignment	not modelled	6.1	Fold: PurM C-terminal domain-like Superfamily: PurM C-terminal domain-like Family: PurM C-terminal domain-like
92	d2eyqa1	Alignment	not modelled	6.1	Fold: SH3-like barrel Superfamily: Card-like Family: Card-like
93	d1vi6a	Alignment	not modelled	6.1	Fold: Flavodoxin-like Superfamily: Ribosomal protein S2 Family: Ribosomal protein S2
94	c2qniA	Alignment	not modelled	6.0	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein atu0299; PDBTitle: crystal structure of uncharacterized protein atu0299
95	c1yfsB	Alignment	not modelled	5.9	PDB header: ligase Chain: B; PDB Molecule: alanyl-tRNA synthetase; PDBTitle: the crystal structure of alanyl-tRNA synthetase in complex2 with l-alanine
96	d1ky9a1	Alignment	not modelled	5.9	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: HtrA-like serine proteases
97	c2j5uB	Alignment	not modelled	5.8	PDB header: cell shape regulation Chain: B; PDB Molecule: mrec protein; PDBTitle: mrec lysteria moncytogenes
98	c2qq4A	Alignment	not modelled	5.8	PDB header: metal binding protein Chain: A; PDB Molecule: iron-sulfur cluster biosynthesis protein iscu; PDBTitle: crystal structure of iron-sulfur cluster biosynthesis2 protein iscu (ttha1736) from thermus thermophilus hb8
99	c2hw2A	Alignment	not modelled	5.8	PDB header: transferase Chain: A; PDB Molecule: rifampin adp-ribosyl transferase; PDBTitle: crystal structure of rifampin adp-ribosyl transferase in2 complex with rifampin