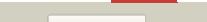
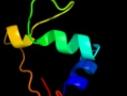
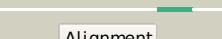
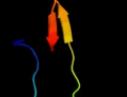
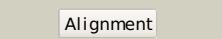
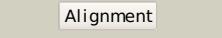
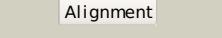
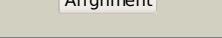
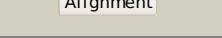
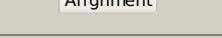


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P39310
Date	Thu Jan 5 11:59:16 GMT 2012
Unique Job ID	8375c059c3f4bde7

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2gu1A_			99.2	24	PDB header: hydrolase Chain: A; PDB Molecule: zinc peptidase; PDBTitle: crystal structure of a zinc containing peptidase from2 vibrio cholerae
2	c2l9yA_			98.4	13	PDB header: sugar binding protein Chain: A; PDB Molecule: cvnh-lysm lectin; PDBTitle: solution structure of the mocvnh-lysm module from the rice blast2 fungus magnaporthe oryzae protein (mgg_03307)
3	c2djpaA_			98.3	16	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein sb145; PDBTitle: the solution structure of the lysm domain of human2 hypothetical protein sb145
4	d1e0ga_			98.3	31	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
5	d1y7ma2			98.1	23	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
6	c1y7mb_			97.2	16	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: hypothetical protein bsu14040; PDBTitle: crystal structure of the b. subtilis ykud protein at 2 a2 resolution
7	c2155A_			58.2	19	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
8	d1rr7a_			55.8	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Middle operon regulator, Mor
9	c1rr7A_			55.8	21	PDB header: transcription Chain: A; PDB Molecule: middle operon regulator; PDBTitle: crystal structure of the middle operon regulator protein of2 bacteriophage mu
10	c1ei5A_			53.6	24	PDB header: hydrolase Chain: A; PDB Molecule: d-aminopeptidase; PDBTitle: crystal structure of a d-aminopeptidase from ochrobactrum2 anthropi
11	c1vzyA_			43.6	19	PDB header: chaperone Chain: A; PDB Molecule: 33 kda chaperonin; PDBTitle: crystal structure of the bacillus subtilis hsp33

12	d1nera_			42.8	16	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
13	d2obpa1			42.7	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: ReutB4095-like
14	c1zeqX_			42.4	17	PDB header: metal binding protein Chain: X: PDB Molecule: cation efflux system protein cuf; PDBTitle: 1.5 a structure of apo-cuf residues 6-88 from escherichia coli
15	d2jn6a1			42.0	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Cgl2762-like
16	c2elhA_			40.2	23	PDB header: dna binding protein Chain: A: PDB Molecule: cg11849-pa; PDBTitle: solution structure of the cenp-b n-terminal dna-binding2 domain of fruit fly distal antenna cg11849-pa
17	c2pmzV_			38.9	8	PDB header: translation, transferase Chain: V: PDB Molecule: dna-directed rna polymerase subunit h; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus
18	c1vg0A_			38.8	11	PDB header: chaperone Chain: A: PDB Molecule: 33 kda chaperonin; PDBTitle: crystal structure of 33 kda chaperonin (heat shock protein 33 homolog2 (hsp33) (tm1394) from thermotoga maritima at 2.20 a resolution
19	c2r0qF_			37.0	15	PDB header: recombination/dna Chain: F: PDB Molecule: putative transposon tn552 dna-invertase bin3; PDBTitle: crystal structure of a serine recombinase- dna regulatory2 complex
20	d1hmja_			35.5	8	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5
21	d1je3a_		not modelled	35.2	13	Fold: IF3-like Superfamily: SirA-like Family: SirA-like
22	d1vq0a1		not modelled	32.4	11	Fold: Hsp33 domain Superfamily: Hsp33 domain Family: Hsp33 domain
23	c1hw7A_		not modelled	31.8	21	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein hsp33; PDBTitle: hsp33, heat shock protein with redox-regulated chaperone activity
24	d1hw7a_		not modelled	31.8	21	Fold: Hsp33 domain Superfamily: Hsp33 domain Family: Hsp33 domain
25	c3iswA_		not modelled	31.5	14	PDB header: structural protein Chain: A: PDB Molecule: filamin-a; PDBTitle: crystal structure of filamin-a immunoglobulin-like repeat 21 bound to an n-terminal peptide of cftr
26	d1eika_		not modelled	31.4	10	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5
27	d1vzya1		not modelled	30.8	17	Fold: Hsp33 domain Superfamily: Hsp33 domain Family: Hsp33 domain
28	d1uxca_		not modelled	29.0	13	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
29	c1i7fa_		not modelled	28.9	20	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein 33;

29	c1tta	Alignment	not modelled	28.9	20	PDBTitle: crystal structure of the hsp33 domain with constitutive chaperone2 activity
30	d2i6va1	Alignment	not modelled	28.6	22	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: EpsC C-terminal domain-like
31	c3mm1E	Alignment	not modelled	27.8	29	PDB header: hydrolase Chain: E; PDB Molecule: allophanate hydrolase subunit 2; PDBTitle: allophanate hydrolase complex from mycobacterium smegmatis, msmeg0435-2 msmeg0436
32	d2i4sa1	Alignment	not modelled	25.0	22	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: EpsC C-terminal domain-like
33	c3cecA	Alignment	not modelled	24.6	21	PDB header: transcription Chain: A; PDB Molecule: putative antidote protein of plasmid maintenance system; PDBTitle: crystal structure of a putative antidote protein of plasmid2 maintenance system (npun_f2943) from nostoc punctiforme pcc 73102 at3 1.60 a resolution
34	d1dzfa2	Alignment	not modelled	24.6	18	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPBs
35	d1dcja	Alignment	not modelled	24.5	13	Fold: IF3-like Superfamily: SirA-like Family: SirA-like
36	c2ia2D	Alignment	not modelled	24.3	8	PDB header: transcription Chain: D; PDB Molecule: putative transcriptional regulator; PDBTitle: the crystal structure of a putative transcriptional regulator rha061952 from rhodococcus sp. rha1
37	d1i7ha	Alignment	not modelled	23.8	14	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
38	c3hefB	Alignment	not modelled	23.5	10	PDB header: viral protein Chain: B; PDB Molecule: gene 1 protein; PDBTitle: crystal structure of the bacteriophage sf6 terminase small2 subunit
39	d2fug33	Alignment	not modelled	22.8	24	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
40	d1hfua2	Alignment	not modelled	22.7	12	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
41	d1twfc2	Alignment	not modelled	22.6	29	Fold: Insert subdomain of RNA polymerase alpha subunit Superfamily: Insert subdomain of RNA polymerase alpha subunit Family: Insert subdomain of RNA polymerase alpha subunit
42	dluxda	Alignment	not modelled	22.5	13	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
43	c2zpmA	Alignment	not modelled	22.4	6	PDB header: hydrolase Chain: A; PDB Molecule: regulator of sigma e protease; PDBTitle: crystal structure analysis of pdz domain b
44	d3c8ya2	Alignment	not modelled	22.4	14	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
45	c2gm4B	Alignment	not modelled	22.2	12	PDB header: recombination, dna Chain: B; PDB Molecule: transposon gamma-delta resolvase; PDBTitle: an activated, tetrameric gamma-delta resolvase: hin chimaera bound to cleaved dna
46	d2proc1	Alignment	not modelled	22.2	50	Fold: Alpha-lytic protease prodomain-like Superfamily: Alpha-lytic protease prodomain Family: Alpha-lytic protease prodomain
47	d1y0pa3	Alignment	not modelled	21.9	8	Fold: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Superfamily: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Family: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain
48	d1d1la	Alignment	not modelled	21.9	22	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
49	c2pijB	Alignment	not modelled	21.2	22	PDB header: transcription Chain: B; PDB Molecule: prophage pfl 6 cro; PDBTitle: structure of the cro protein from prophage pfl 6 in pseudomonas2 fluorescens pf-5
50	d2q9oa2	Alignment	not modelled	21.2	12	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
51	c2rn7A	Alignment	not modelled	21.1	9	PDB header: unknown function Chain: A; PDB Molecule: s629 orfa; PDBTitle: nmr solution structure of tnp6 protein from shigella2 flexneri. northeast structural genomics target sfr125
52	d1wlha1	Alignment	not modelled	20.9	22	Fold: immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
53	c2brqB	Alignment	not modelled	20.9	14	PDB header: structural protein Chain: B; PDB Molecule: filamin a; PDBTitle: crystal structure of the filamin a repeat 21 complexed with2 the integrin beta7 cytoplasmic tail peptide
54	d1ei5a2	Alignment	not modelled	20.9	24	Fold: Streptavidin-like Superfamily: D-amino peptidase, middle and C-terminal domains Family: D-amino peptidase, middle and C-terminal domains
55	c2lcvA	Alignment	not modelled	20.7	13	PDB header: transcription regulator Chain: A; PDB Molecule: hth-type transcriptional repressor cyr;

55	c2tewA	Alignment	not modelled	20.7	13	PDBTitle: structure of the cytidine repressor dna-binding domain; an alternate2 calculation
56	d1v10a2	Alignment	not modelled	20.3	12	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
57	d1fdra1	Alignment	not modelled	20.1	29	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin synthase domain-like Family: Ferrodoxin reductase FAD-binding domain-like
58	c3fiaA	Alignment	not modelled	20.1	16	PDB header: protein binding Chain: A: PDB Molecule: intersectin-1; PDBTitle: crystal structure of the eh 1 domain from human intersectin-2-1 protein. northeast structural genomics consortium target3 hr3646e.
59	d1kyaa2	Alignment	not modelled	19.9	10	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
60	c2gu3A	Alignment	not modelled	19.0	10	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ypmb protein; PDBTitle: ypmB protein from bacillus subtilis
61	c3f6vA	Alignment	not modelled	18.6	13	PDB header: transcription regulator Chain: A: PDB Molecule: possible transcriptional regulator, arsr family PDBTitle: crystal structure of possible transcriptional regulator for2 arsenical resistance
62	d4fxca	Alignment	not modelled	18.3	7	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
63	c1p0oA	Alignment	not modelled	18.3	25	PDB header: ribosome Chain: A: PDB Molecule: 19-mer peptide from 50S ribosomal protein l1; PDBTitle: hp (2-20) substitution of trp for gln and asp at position2 17 and 19 modification in sds-d25 micelles
64	d1aoza2	Alignment	not modelled	18.1	20	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
65	d1a8pa1	Alignment	not modelled	18.1	20	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin synthase domain-like Family: Ferrodoxin reductase FAD-binding domain-like
66	d1gyca2	Alignment	not modelled	17.8	17	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Multidomain cupredoxins
67	c218nA	Alignment	not modelled	17.7	12	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional repressor cytr; PDBTitle: nmr structure of the cytidine repressor dna binding domain in presence2 of operator half-site dna
68	c3lxfc	Alignment	not modelled	17.2	28	PDB header: metal binding protein Chain: C: PDB Molecule: ferredoxin; PDBTitle: crystal structure of [2fe-2s] ferredoxin arx from novosphingobium2 aromaticivorans
69	d2gu3a1	Alignment	not modelled	16.8	10	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: PepSY-like
70	d4croa	Alignment	not modelled	16.7	22	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
71	d1awda	Alignment	not modelled	16.5	10	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
72	d1bw6a	Alignment	not modelled	16.5	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Centromere-binding
73	d1hlva1	Alignment	not modelled	16.4	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Centromere-binding
74	d2cuua	Alignment	not modelled	16.0	20	Fold: Cupredoxin-like Superfamily: Cupredoxins Family: Periplasmic domain of cytochrome c oxidase subunit II
75	d2hsga1	Alignment	not modelled	15.8	13	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
76	c3cuoB	Alignment	not modelled	15.6	17	PDB header: transcription regulator Chain: B: PDB Molecule: uncharacterized hth-type transcriptional regulator ygav; PDBTitle: crystal structure of the predicted dna-binding transcriptional2 regulator from e. coli
77	c2kjpa	Alignment	not modelled	15.6	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein ylbl; PDBTitle: solution structure of protein ylbl (bsu15050) from bacillus2 subtilis, northeast structural genomics consortium target3 sr713a
78	c2xroE	Alignment	not modelled	15.3	16	PDB header: dna-binding protein/dna Chain: E: PDB Molecule: hth-type transcriptional regulator ttgv; PDBTitle: crystal structure of ttgv in complex with its dna operator
79	d1mkma1	Alignment	not modelled	15.1	4	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Transcriptional regulator IcIR, N-terminal domain
80	c3h0gE	Alignment	not modelled	15.0	15	PDB header: transcription Chain: E: PDB Molecule: dna-directed rna polymerases i, ii, and iii PDBTitle: rna polymerase ii from schizosaccharomyces pombe Fold: EF Hand-like

81	d2jxca1	Alignment	not modelled	15.0	10	Superfamily: EF-hand Family: Eps15 homology domain (EH domain)
82	d2icta1	Alignment	not modelled	15.0	7	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: SinR domain-like
83	d1nxza1	Alignment	not modelled	14.9	20	Fold: PUA domain-like Superfamily: PUA domain-like Family: YggJ N-terminal domain-like
84	d1zud21	Alignment	not modelled	14.7	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: This
85	d1lcda_	Alignment	not modelled	14.7	12	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: GalR/LacI-like bacterial regulator
86	c3c19A_	Alignment	not modelled	14.5	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein mk0293; PDBTitle: crystal structure of protein mk0293 from methanopyrus kandleri av19
87	d1jiwi_	Alignment	not modelled	14.4	19	Fold: Streptavidin-like Superfamily: beta-Barrel protease inhibitors Family: Metalloprotease inhibitor
88	c1mkmA_	Alignment	not modelled	14.3	4	PDB header: transcription Chain: A: PDB Molecule: iclr transcriptional regulator; PDBTitle: crystal structure of the thermotoga maritima iclr
89	d1wxma1	Alignment	not modelled	13.9	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
90	c2otgA_	Alignment	not modelled	13.9	19	PDB header: contractile protein Chain: A: PDB Molecule: myosin heavy chain; PDBTitle: rigor-like structures of muscle myosins reveal key2 mechanical elements in the transduction pathways of this3 allosteric motor
91	c3p42D_	Alignment	not modelled	13.7	25	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
92	d1e9ma_	Alignment	not modelled	13.6	28	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
93	d3orca_	Alignment	not modelled	13.4	26	Fold: lambda repressor-like DNA-binding domains Superfamily: lambda repressor-like DNA-binding domains Family: Phage repressors
94	d1hh2p4	Alignment	not modelled	13.3	18	Fold: Transcription factor NusA, N-terminal domain Superfamily: Transcription factor NusA, N-terminal domain Family: Transcription factor NusA, N-terminal domain
95	c2kfhA_	Alignment	not modelled	13.3	16	PDB header: protein binding Chain: A: PDB Molecule: eh domain-containing protein 1; PDBTitle: structure of the c-terminal domain of ehd1 with fnyestgpftak
96	d1kk8a2	Alignment	not modelled	13.2	19	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Motor proteins
97	d1d0xa2	Alignment	not modelled	13.1	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Motor proteins
98	c2o0yB_	Alignment	not modelled	13.1	19	PDB header: transcription Chain: B: PDB Molecule: transcriptional regulator; PDBTitle: crystal structure of putative transcriptional regulator rha1 ro069532 (iclr-family) from rhodococcus sp.
99	d1d4ca3	Alignment	not modelled	13.1	27	Fold: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Superfamily: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain Family: Succinate dehydrogenase/fumarate reductase flavoprotein, catalytic domain