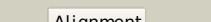
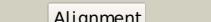
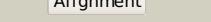
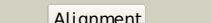
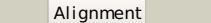
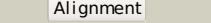
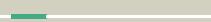
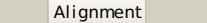
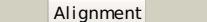
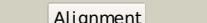
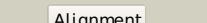
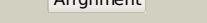
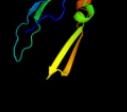
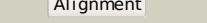
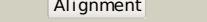
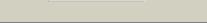


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P39829
Date	Thu Jan 5 12:00:53 GMT 2012
Unique Job ID	5823a77f3a0672ae

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3lazB_			100.0	98	PDB header: lyase Chain: B; PDB Molecule: d-galactarate dehydratase; PDBTitle: the crystal structure of the n-terminal domain of d-2 galactarate dehydratase from escherichia coli cft073
2	c3k3sG_			99.9	36	PDB header: hydrolase Chain: G; PDB Molecule: altronate hydrolase; PDBTitle: crystal structure of altronate hydrolase (fragment 1-84) from shigella2 flexneri.
3	c1qd1A_			72.7	14	PDB header: transferase Chain: A; PDB Molecule: formiminotransferase-cyclodeaminase; PDBTitle: the crystal structure of the formiminotransferase domain of2 formiminotransferase-cyclodeaminase.
4	c3degC_			59.7	19	PDB header: ribosome Chain: C; PDB Molecule: gtp-binding protein lepa; PDBTitle: complex of elongating escherichia coli 70s ribosome and ef4(lepa)-2 gmppnp
5	d2nu7b1			54.9	9	Fold: Flavodoxin-like Superfamily: Succinyl-CoA synthetase domains Family: Succinyl-CoA synthetase domains
6	c1tt9B_			53.2	17	PDB header: transferase, lyase Chain: B; PDB Molecule: formimidoyltransferase-cyclodeaminase PDBTitle: structure of the bifunctional and golgi associated2 formiminotransferase cyclodeaminase octamer
7	c3cwcB_			52.7	14	PDB header: transferase Chain: B; PDB Molecule: putative glycerate kinase 2; PDBTitle: crystal structure of putative glycerate kinase 2 from salmonella2 typhimurium lt2
8	d2zdra1			51.0	18	Fold: beta-clip Superfamily: AFP III-like domain Family: AFP III-like domain
9	c3g8rA_			48.7	12	PDB header: biosynthetic protein Chain: A; PDB Molecule: probable spore coat polysaccharide biosynthesis protein e; PDBTitle: crystal structure of putative spore coat polysaccharide biosynthesis2 protein e from chromobacterium violaceum atcc 12472
10	c3b8hA_			41.9	13	PDB header: biosynthetic protein/transferase Chain: A; PDB Molecule: elongation factor 2; PDBTitle: structure of the eef2-exoa(e546a)-nad+ complex
11	d2f69a2			41.2	29	Fold: beta-clip Superfamily: SET domain Family: Histone lysine methyltransferases

12	c3tr5C_			40.0	17	PDB header: translation Chain: C: PDB Molecule: peptide chain release factor 3; PDBTitle: structure of a peptide chain release factor 3 (prfc) from coxiella2 burnetii
13	d1csha_			38.3	14	Fold: Citrate synthase Superfamily: Citrate synthase Family: Citrate synthase
14	c3izq1_			37.9	15	PDB header: ribosomal protein,hydrolase Chain: 1: PDB Molecule: elongation factor 1 alpha-like protein; PDBTitle: structure of the dom34-hbs1-gdpnp complex bound to a translating2 ribosome
15	c3frnA_			34.8	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: flagellar protein flga; PDBTitle: crystal structure of flagellar protein flga from thermotoga maritima2 msb8
16	c2elfA_			32.2	13	PDB header: translation Chain: A: PDB Molecule: protein translation elongation factor 1a; PDBTitle: crystal structure of the selb-like elongation factor efp1y2 from methanosaerica mazae
17	c3cnlA_			31.8	16	PDB header: signaling protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of gnp-bound ylqf from t. maritima
18	c3m7oB_			30.8	11	PDB header: immune system Chain: B: PDB Molecule: lymphocyte antigen 86; PDBTitle: crystal structure of mouse md-1 in complex with phosphatidylcholine
19	c2ywfa_			30.0	12	PDB header: translation Chain: A: PDB Molecule: gtp-binding protein lepa; PDBTitle: crystal structure of gmppnp-bound lepa from aquifex aeolicus
20	d1puja_			28.0	24	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
21	d1c8ba_		not modelled	28.0	23	Fold: Phosphorylase/hydrolase-like Superfamily: HybD-like Family: Germination protease
22	c1g7tA_		not modelled	27.3	18	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if2/eif5b; PDBTitle: x-ray structure of translation initiation factor if2/eif5b2 complexed with gdppn
23	d1vlia1		not modelled	27.1	17	Fold: beta-clip Superfamily: AFP III-like domain Family: AFP III-like domain
24	c3bicA_		not modelled	25.8	18	PDB header: isomerase Chain: A: PDB Molecule: methylmalonyl-coa mutase, mitochondrial precursor; PDBTitle: crystal structure of human methylmalonyl-coa mutase
25	c2j69D_		not modelled	25.3	11	PDB header: hydrolase Chain: D: PDB Molecule: bacterial dynamin-like protein; PDBTitle: bacterial dynamin-like protein bdlp
26	c1vlia_		not modelled	24.4	26	PDB header: biosynthetic protein Chain: A: PDB Molecule: spore coat polysaccharide biosynthesis protein spse; PDBTitle: crystal structure of spore coat polysaccharide biosynthesis protein2 spse (bsu37870) from bacillus subtilis at 2.38 a resolution
27	c1xqhE_		not modelled	23.7	23	PDB header: transferase Chain: E: PDB Molecule: histone-lysine n-methyltransferase, h3 lysine-4 PDBTitle: crystal structure of a ternary complex of the2 methyltransferase set9 (also known as set7/9) with a p533 peptide and sah
						PDB header: chaperone

28	c3ka5A		Alignment	not modelled	23.5	40	Chain: A: PDB Molecule: ribosome-associated protein y (psrp-1); PDBTitle: crystal structure of ribosome-associated protein y (psrp-1)2 from clostridium acetobutylicum. northeast structural3 genomics consortium target id car123a
29	c3h6IA		Alignment	not modelled	23.1	15	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase setd2; PDBTitle: methyltransferase domain of human set domain-containing protein 2
30	c3k2tA		Alignment	not modelled	22.7	40	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lmo2511 protein; PDBTitle: crystal structure of lmo2511 protein from listeria2 monocytogenes, northeast structural genomics consortium3 target lkr84a
31	c3f9xA		Alignment	not modelled	22.4	38	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase setd8; PDBTitle: structural insights into lysine multiple methylation by set2 domain methyltransferases, set8-y334f / h4-lys20me2 /3 adohcy
32	c1xuzA		Alignment	not modelled	22.3	18	PDB header: biosynthetic protein Chain: A: PDB Molecule: polysialic acid capsule biosynthesis protein siaC; PDBTitle: crystal structure analysis of sialic acid synthase (neub)from2 neisseria meningitidis, bound to mn2+, phosphoenolpyruvate, and n-3 acetyl mannosaminitol
33	c1zoll		Alignment	not modelled	21.5	15	PDB header: translation/rna Chain: I: PDB Molecule: translation initiation factor 2; PDBTitle: if2, if1, and trna fitted to cryo-em data of e. coli 70s2 initiation complex
34	c2bm0A		Alignment	not modelled	21.4	18	PDB header: elongation factor Chain: A: PDB Molecule: elongation factor g; PDBTitle: ribosomal elongation factor g (ef-g) fusidic acid resistant2 mutant t84a
35	c3m5uA		Alignment	not modelled	21.3	13	PDB header: transferase Chain: A: PDB Molecule: phosphoserine aminotransferase; PDBTitle: crystal structure of phosphoserine aminotransferase from2 campylobacter jejuni
36	c3opeA		Alignment	not modelled	21.2	46	PDB header: transferase Chain: A: PDB Molecule: probable histone-lysine n-methyltransferase ash1L; PDBTitle: structural basis of auto-inhibitory mechanism of histone2 methyltransferase
37	c1x5bA		Alignment	not modelled	21.0	11	PDB header: protein binding Chain: A: PDB Molecule: signal transducing adaptor molecule 2; PDBTitle: the solution structure of the vhs domain of human signal2 transducing adaptor molecule 2
38	c2z64C		Alignment	not modelled	21.0	14	PDB header: immune system Chain: C: PDB Molecule: lymphocyte antigen 96; PDBTitle: crystal structure of mouse tlr4 and mouse md-2 complex
39	d1h3ia2		Alignment	not modelled	20.9	20	Fold: beta-clip Superfamily: SET domain Family: Histone lysine methyltransferases
40	c3bo5A		Alignment	not modelled	20.7	31	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase setmar; PDBTitle: crystal structure of methyltransferase domain of human histone-lysine2 n-methyltransferase setmar
41	c3ooiA		Alignment	not modelled	20.3	46	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase, h3 lysine-36 and h4 PDBTitle: crystal structure of human histone-lysine n-methyltransferase nsd1 set2 domain in complex with s-adenosyl-L-methionine
42	d1umqa		Alignment	not modelled	19.4	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: FIS-like
43	clumqA		Alignment	not modelled	19.4	10	PDB header: dna-binding protein Chain: A: PDB Molecule: photosynthetic apparatus regulatory protein; PDBTitle: solution structure and dna binding of the effector domain2 from the global regulator prrA(pra) from r. sphaeroides:3 insights into dna binding specificity
44	d1ml9a		Alignment	not modelled	19.3	38	Fold: beta-clip Superfamily: SET domain Family: Histone lysine methyltransferases
45	d1elka		Alignment	not modelled	18.8	12	Fold: alpha-alpha superhelix Superfamily: ENTH/VHS domain Family: VHS domain
46	c2xexA		Alignment	not modelled	18.5	17	PDB header: translation Chain: A: PDB Molecule: elongation factor g; PDBTitle: crystal structure of staphylococcus aureus elongation factor2 g
47	d1mvha		Alignment	not modelled	17.6	31	Fold: beta-clip Superfamily: SET domain Family: Histone lysine methyltransferases
48	c1mvhA		Alignment	not modelled	17.6	31	PDB header: transferase Chain: A: PDB Molecule: cryptic loci regulator 4; PDBTitle: structure of the set domain histone lysine2 methyltransferase clr4
49	d1dvpa1		Alignment	not modelled	17.2	13	Fold: alpha-alpha superhelix Superfamily: ENTH/VHS domain Family: VHS domain
50	d1nuia2		Alignment	not modelled	16.8	56	Fold: Rubredoxin-like Superfamily: Zinc beta-ribbon Family: DNA primase zinc finger
							PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase

51	c2r3aA	Alignment	not modelled	16.2	23	suv39h2; PDB header: methyltransferase domain of human suppressor of variegation2 3-9 homolog 2 Chain: A: PDB Molecule: translation initiation factor 2 gamma subunit; PDB Title: eif2gamma apo
52	c1s0uA	Alignment	not modelled	16.0	15	Fold: Flavodoxin-like Superfamily: Succinyl-CoA synthetase domains Family: Succinyl-CoA synthetase domains
53	d1eucb1	Alignment	not modelled	15.8	9	Fold: Citrate synthase Superfamily: Citrate synthase Family: Citrate synthase
54	d2ctsa	Alignment	not modelled	15.8	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dsrr; PDB Title: solution nmr structure of allochromatium vinosum dsrr:2 northeast structural genomics consortium target op5
55	c2k4zA	Alignment	not modelled	14.7	3	PDB header: translation Chain: D: PDB Molecule: gtp-binding protein lepa; PDB Title: the crystal structure of lepa
56	c3cb4D	Alignment	not modelled	14.3	19	Fold: Citrate synthase Superfamily: Citrate synthase Family: Citrate synthase
57	d1csca	Alignment	not modelled	13.7	15	Fold: Citrate synthase Superfamily: Citrate synthase Family: Citrate synthase
58	d1txna	Alignment	not modelled	13.7	14	Fold: Coproporphyrinogen III oxidase Superfamily: Coproporphyrinogen III oxidase Family: Coproporphyrinogen III oxidase
59	c3s8pA	Alignment	not modelled	13.6	46	PDB header: transferase Chain: A: PDB Molecule: histone-lysine N-methyltransferase suv420h1; PDB Title: crystal structure of the set domain of human histone-lysine N-2 methylation transferase suv420h1 in complex with S-adenosyl-L-methionine
60	d1ucva	Alignment	not modelled	12.7	23	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
61	c3by5A	Alignment	not modelled	12.7	30	PDB header: biosynthetic protein Chain: A: PDB Molecule: cobalamin biosynthesis protein; PDB Title: crystal structure of cobalamin biosynthesis protein chig from2 agrobacterium tumefaciens str. c58
62	d3by5a1	Alignment	not modelled	12.7	30	Fold: CobE/GbiG C-terminal domain-like Superfamily: CobE/GbiG C-terminal domain-like Family: CobE/GbiG C-terminal domain-like
63	c2qptA	Alignment	not modelled	12.3	16	PDB header: endocytosis Chain: A: PDB Molecule: ehd domain-containing protein-2; PDB Title: crystal structure of an ehd ATPase involved in membrane remodelling
64	c3mu3A	Alignment	not modelled	12.2	11	PDB header: immune system Chain: A: PDB Molecule: protein md-1; PDB Title: crystal structure of chicken md-1 complexed with lipid iVa
65	d1ynya1	Alignment	not modelled	12.0	22	Fold: Composite domain of metallo-dependent hydrolases Superfamily: Composite domain of metallo-dependent hydrolases Family: Hydantoinase (dihydropyrimidinase)
66	d1wjta	Alignment	not modelled	11.7	13	Fold: N-cbl like Superfamily: Conserved domain common to transcription factors TFIIS, elongin A, CRSP70 Family: Conserved domain common to transcription factors TFIIS, elongin A, CRSP70
67	d2olra1	Alignment	not modelled	11.7	15	Fold: PEP carboxykinase-like Superfamily: PEP carboxykinase-like Family: PEP carboxykinase C-terminal domain
68	c3simA	Alignment	not modelled	11.7	11	PDB header: hydrolase Chain: A: PDB Molecule: protein, family 18 chitinase; PDB Title: crystallographic structure analysis of family 18 chitinase from crocus2 vernus
69	c3nioF	Alignment	not modelled	11.4	23	PDB header: hydrolase Chain: F: PDB Molecule: guanidinobutyrase; PDB Title: crystal structure of pseudomonas aeruginosa guanidinobutyrase
70	d1fx0a1	Alignment	not modelled	11.4	18	Fold: Left-handed superhelix Superfamily: C-terminal domain of alpha and beta subunits of F1 ATP synthase Family: C-terminal domain of alpha and beta subunits of F1 ATP synthase
71	c2rdo7	Alignment	not modelled	11.3	15	PDB header: ribosome Chain: 7: PDB Molecule: elongation factor g; PDB Title: 50s subunit with ef-g(gdpnpp) and rrf bound
72	c1e1cA	Alignment	not modelled	11.2	15	PDB header: isomerase Chain: A: PDB Molecule: methylmalonyl-coa mutase alpha chain; PDB Title: methylmalonyl-coa mutase h244a mutant
73	d1to6a	Alignment	not modelled	11.1	15	Fold: Glycerate kinase I Superfamily: Glycerate kinase I Family: Glycerate kinase I
74	c1skqB	Alignment	not modelled	10.8	18	PDB header: translation Chain: B: PDB Molecule: elongation factor 1-alpha; PDB Title: the crystal structure of sulfolobus solfataricus elongation2 factor 1-alpha in complex with magnesium and gdp
75	d1fuea	Alignment	not modelled	10.8	17	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
76	d1v8qa	Alignment	not modelled	10.7	37	Fold: Barrel-sandwich hybrid Superfamily: Ribosomal L27 protein-like Family: Ribosomal L27 protein

77	c3fin0_	Alignment	not modelled	10.7	37	PDB header: ribosome Chain: 0; PDB Molecule: 50s ribosomal protein l27; PDBTitle: t. thermophilus 70s ribosome in complex with mrna, trnas2 and ef-tu.gdp.kirromycin ternary complex, fitted to a 6.43 a cryo-em map. this file contains the 50s subunit.
78	c2hdnl_	Alignment	not modelled	10.7	14	PDB header: translation Chain: J; PDB Molecule: elongation factor ef-tu; PDBTitle: trypsin-modified elongation factor tu in complex with2 tetracycline at 2.8 angstrom resolution
79	d1hr0w_	Alignment	not modelled	10.3	20	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
80	d1yv9a1_	Alignment	not modelled	10.3	15	Fold: HAD-like Superfamily: HAD-like Family: NagD-like
81	d1o0ya_	Alignment	not modelled	10.0	16	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
82	d2f23a2_	Alignment	not modelled	10.0	14	Fold: FKBP-like Superfamily: FKBP-like Family: GreA transcript cleavage factor, C-terminal domain
83	c3b8iF_	Alignment	not modelled	9.9	18	PDB header: lyase Chain: F; PDB Molecule: pa4872 oxaloacetate decarboxylase; PDBTitle: crystal structure of oxaloacetate decarboxylase from pseudomonas2 aeruginosa (pa4872) in complex with oxalate and mg2+.
84	d2py8a1_	Alignment	not modelled	9.9	10	Fold: RbcX-like Superfamily: RbcX-like Family: RbcX-like
85	c2gqwA_	Alignment	not modelled	9.7	20	PDB header: transcription Chain: A; PDB Molecule: pr domain zinc finger protein 2; PDBTitle: methyltransferase domain of human pr domain-containing2 protein 2
86	d2h2ja2_	Alignment	not modelled	9.6	5	Fold: beta-clip Superfamily: SET domain Family: RuBisCo LSMT catalytic domain
87	c2gedB_	Alignment	not modelled	9.4	18	PDB header: protein transport, signaling protein Chain: B; PDB Molecule: signal recognition particle receptor beta PDBTitle: signal recognition particle receptor beta-subunit in2 nucleotide-free dimerized form
88	c2f5jA_	Alignment	not modelled	9.4	26	PDB header: gene regulation Chain: A; PDB Molecule: mortality factor 4-like protein 1; PDBTitle: crystal structure of mrg domain from human mrg15
89	c3nipB_	Alignment	not modelled	9.3	19	PDB header: hydrolase Chain: B; PDB Molecule: 3-guanidinopropionase; PDBTitle: crystal structure of pseudomonas aeruginosa guanidinopropionate2 complexed with 1,6-diaminohexane
90	c3mmpC_	Alignment	not modelled	9.2	15	PDB header: transferase Chain: C; PDB Molecule: elongation factor tu 2, elongation factor ts; PDBTitle: structure of the qb replicase, an rna-dependent rna polymerase2 consisting of viral and host proteins
91	d1vf5c1_	Alignment	not modelled	9.1	36	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Cytochrome f, large domain Family: Cytochrome f, large domain
92	c2w5zA_	Alignment	not modelled	8.8	27	PDB header: transferase Chain: A; PDB Molecule: histone-lysine n-methyltransferase hrx; PDBTitle: ternary complex of the mixed lineage leukaemia (ml1) set2 domain with the cofactor products s-adenosylhomocysteine3 and histone peptide.
93	d1z9ha1_	Alignment	not modelled	8.6	10	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
94	c3eoec_	Alignment	not modelled	8.5	12	PDB header: transferase Chain: C; PDB Molecule: pyruvate kinase; PDBTitle: crystal structure of pyruvate kinase from toxoplasma gondii, 55.m00007
95	c3izyP_	Alignment	not modelled	8.5	12	PDB header: rna, ribosomal protein Chain: P; PDB Molecule: translation initiation factor if-2, mitochondrial; PDBTitle: mammalian mitochondrial translation initiation factor 2
96	d1gg6a_	Alignment	not modelled	8.4	28	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases
97	d1pkla3_	Alignment	not modelled	8.1	12	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
98	d1xm3a_	Alignment	not modelled	8.1	15	Fold: TIM beta/alpha-barrel Superfamily: ThiG-like Family: ThiG-like
99	d1wx0a1_	Alignment	not modelled	8.0	60	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase