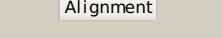
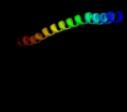
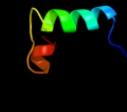
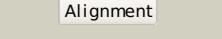
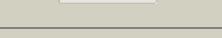
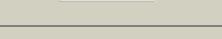
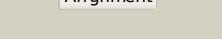
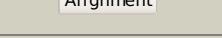


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P45762
Date	Thu Jan 5 12:03:39 GMT 2012
Unique Job ID	a2a10e05183abe98

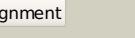
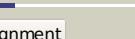
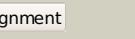
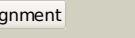
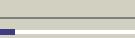
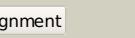
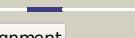
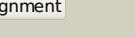
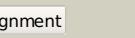
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ci0K_	Alignment		100.0	35	PDB header: protein transport Chain: K; PDB Molecule: pseudopilin gspk; PDBTitle: the crystal structure of the gspk-gspi-gspj complex from2 enterotoxigenic escherichia coli type 2 secretion system
2	d3ci0k2	Alignment		100.0	38	Fold: SAM domain-like Superfamily: GspK insert domain-like Family: GspK insert domain-like
3	d3ci0k3	Alignment		99.6	28	Fold: Pili subunits Superfamily: Pili subunits Family: GspK pilin-like domain
4	d3ci0k1	Alignment		99.0	40	Fold: SAM domain-like Superfamily: GspK insert domain-like Family: GspK insert domain-like
5	d2duya1	Alignment		97.2	24	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: ComEA-like
6	d2edua1	Alignment		96.4	20	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: ComEA-like
7	d3bzka1	Alignment		96.2	24	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Tex HhH-containing domain-like
8	c1s5lu_	Alignment		95.9	21	PDB header: photosynthesis Chain: U; PDB Molecule: photosystem ii 12 kda extrinsic protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
9	d2axtu1	Alignment		95.7	22	Fold: SAM domain-like Superfamily: PsbU/PolX domain-like Family: PsbU-like
10	c2oceA_	Alignment		79.7	14	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein pa5201; PDBTitle: crystal structure of tex family protein pa5201 from2 pseudomonas aeruginosa
11	c3sokB_	Alignment		73.5	18	PDB header: cell adhesion Chain: B; PDB Molecule: fimbrial protein; PDBTitle: dichlobacter nodosus pilin fima

12	c2i5hA_			66.1	7	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein af1531; PDBTitle: crystal structure of af1531 from archaeoglobus fulgidus,2 pfam duf655
13	d2i5ha1			66.1	7	Fold: AF1531-like Superfamily: AF1531-like Family: AF1531-like
14	c3f2cA_			60.5	10	PDB header: transferase/dna Chain: A: PDB Molecule: geobacillus kaustophilus dna polc; PDBTitle: dna polymerase polc from geobacillus kaustophilus complex with dna,2 dgtp and mn
15	d1wg8a1			57.0	19	Fold: SAM domain-like Superfamily: Putative methyltransferase TM0872, insert domain Family: Putative methyltransferase TM0872, insert domain
16	c8icza_			50.6	12	PDB header: transferase/dna Chain: A: PDB Molecule: protein (dna polymerase beta (e.c.2.7.7.7)); PDBTitle: dna polymerase beta (pol b) (e.c.2.7.7.7) complexed with2 seven base pairs of dna; soaked in the presence of of dntp3 (1 millimolar), mnc1 (5 millimolar), and lithium sulfate4 (75 millimolar)
17	d2pila_			49.3	16	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin
18	d1ogwa_			41.4	14	Fold: Pili subunits Superfamily: Pili subunits Family: Pilin
19	c3e0dA_			38.9	32	PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase iii subunit alpha; PDBTitle: insights into the replisome from the crystal structure of2 the ternary complex of the eubacterial dna polymerase iii3 alpha-subunit
20	d1u5ta1			38.7	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
21	c1wg8B_		not modelled	37.6	19	PDB header: transferase Chain: B: PDB Molecule: predicted s-adenosylmethionine-dependent PDBTitle: crystal structure of a predicted s-adenosylmethionine-2 dependent methyltransferase tt1512 from thermus3 thermophilus hb8.
22	d2bgwa1		not modelled	35.1	16	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
23	d2e1fa1		not modelled	31.8	21	Fold: SAM domain-like Superfamily: HRDC-like Family: HRDC domain from helicases
24	c2bcuA_		not modelled	31.0	15	PDB header: transferase, lyase/dna Chain: A: PDB Molecule: dna polymerase lambda; PDBTitle: dna polymerase lambda in complex with a dna duplex2 containing an unpaired damp and a tt mismatch
25	c2kp7A_		not modelled	29.1	13	PDB header: hydrolase Chain: A: PDB Molecule: crossover junction endonuclease mus81; PDBTitle: solution nmr structure of the mus81 n-terminal hh.2 northeast structural genomics consortium target mmtl1a
26	d1ej5a_		not modelled	27.1	31	Fold: Wiscott-Aldrich syndrome protein, WASP, C-terminal domain Superfamily: Wiscott-Aldrich syndrome protein, WASP, C-terminal domain Family: Wiscott-Aldrich syndrome protein, WASP, C-terminal domain
27	c2jd3B_		not modelled	26.8	19	PDB header: dna binding protein Chain: B: PDB Molecule: stbb protein; PDBTitle: parr from plasmid pb171
28	d1dg5a1		not modelled	26.4	15	Fold: SAM domain-like Superfamily: RuvA domain 2-like

						Family: NAD+-dependent DNA ligase, domain 3
29	c2ihmA	Alignment	not modelled	24.9	14	PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase mu; PDBTitle: polymerase mu in ternary complex with gapped 11mer dna2 duplex and bound incoming nucleotide
30	d1x2ia1	Alignment	not modelled	24.5	25	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
31	d2fmpa1	Alignment	not modelled	21.3	8	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
32	c1kdhA	Alignment	not modelled	19.6	14	PDB header: transferase/dna Chain: A: PDB Molecule: terminal deoxynucleotidyltransferase short PDBTitle: binary complex of murine terminal deoxynucleotidyl2 transferase with a primer single stranded dna
33	d1kfta	Alignment	not modelled	19.0	13	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Excinuclease UvrC C-terminal domain
34	c1kftA	Alignment	not modelled	19.0	13	PDB header: dna binding protein Chain: A: PDB Molecule: excinuclease abc subunit c; PDBTitle: solution structure of the c-terminal domain of uvrC from e. coli
35	d2a1jb1	Alignment	not modelled	17.9	13	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
36	c1dgrW	Alignment	not modelled	17.2	9	PDB header: plant protein Chain: W: PDB Molecule: canavalin; PDBTitle: refined crystal structure of canavalin from jack bean
37	c1u5tA	Alignment	not modelled	16.9	16	PDB header: transport protein Chain: A: PDB Molecule: appears to be functionally related to snf7; PDBTitle: structure of the escrt-ii endosomal trafficking complex
38	c2hnhA	Alignment	not modelled	15.4	4	PDB header: transferase Chain: A: PDB Molecule: dna polymerase iii alpha subunit; PDBTitle: crystal structure of the catalytic alpha subunit of e. coli2 replicative dna polymerase iii
39	d1unca	Alignment	not modelled	15.1	18	Fold: VHP, Villin headpiece domain Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain
40	c2x49A	Alignment	not modelled	14.6	15	PDB header: protein transport Chain: A: PDB Molecule: invasion protein inva; PDBTitle: crystal structure of the c-terminal domain of inva
41	c3s7eB	Alignment	not modelled	14.6	6	PDB header: allergen Chain: B: PDB Molecule: allergen ara h 1, clone p41b; PDBTitle: crystal structure of ara h 1
42	d1dk2a	Alignment	not modelled	14.1	8	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
43	c3al0B	Alignment	not modelled	13.7	15	PDB header: ligase/rna Chain: B: PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase subunit b; PDBTitle: crystal structure of the glutamine transamidosome from thermotoga2 maritima in the glutamylated state.
44	d1pzna1	Alignment	not modelled	12.4	25	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
45	c3psiA	Alignment	not modelled	12.3	16	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt6; PDBTitle: crystal structure of the spt6 core domain from saccharomyces2 cerevisiae, form spt6(239-1451)
46	d1yu8x1	Alignment	not modelled	12.0	14	Fold: VHP, Villin headpiece domain Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain
47	c2rhfA	Alignment	not modelled	11.5	17	PDB header: hydrolase Chain: A: PDB Molecule: dna helicase recq; PDBTitle: d. radiodurans recq hrdc domain 3
48	d2bcqa1	Alignment	not modelled	11.2	18	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
49	c2ql5A	Alignment	not modelled	11.1	42	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: caspase-7; PDBTitle: crystal structure of caspase-7 with inhibitor ac-dmqd-cho
50	c1i51A	Alignment	not modelled	11.1	42	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: caspase-7 subunit p20; PDBTitle: crystal structure of caspase-7 complexed with xiap
51	d2p6ra2	Alignment	not modelled	10.8	19	Fold: Sec63 N-terminal domain-like Superfamily: Sec63 N-terminal domain-like Family: Achaeal helicase C-terminal domain
52	d1d8ba	Alignment	not modelled	10.7	4	Fold: SAM domain-like Superfamily: HRDC-like Family: HRDC domain from helicases
53	c3iuoA	Alignment	not modelled	10.6	12	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent dna helicase recq; PDBTitle: the crystal structure of the c-terminal domain of the atp-dependent2 dna helicase recq from porphyromonas gingivalis to 1.6a
54	d1unda	Alignment	not modelled	10.5	18	Fold: VHP, Villin headpiece domain Superfamily: VHP, Villin headpiece domain Family: VHP, Villin headpiece domain

55	c2eaab	Alignment	not modelled	10.4	9	PDB header: plant protein Chain: B: PDB Molecule: 7s globulin-3; PDBTitle: crystal structure of adzuki bean 7s globulin-3
56	c3kscD	Alignment	not modelled	10.0	31	PDB header: plant protein Chain: D: PDB Molecule: lega class; PDBTitle: crystal structure of pea prolegumin, an 11s seed globulin2 from <i>pisum sativum</i> l.
57	c3edqC	Alignment	not modelled	9.9	18	PDB header: hydrolase/hydrolase inhibitor Chain: C: PDB Molecule: caspase-3; PDBTitle: crystal structure of caspase-3 with inhibitor ac-1desd-cho
58	c3c3vA	Alignment	not modelled	9.8	19	PDB header: allergen Chain: A: PDB Molecule: arachin arah3 isoform; PDBTitle: crystal structure of peanut major allergen ara h 3
59	d1nzpa	Alignment	not modelled	9.8	17	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
60	c3psfA	Alignment	not modelled	9.5	14	PDB header: transcription Chain: A: PDB Molecule: transcription elongation factor spt6; PDBTitle: crystal structure of the spt6 core domain from <i>saccharomyces2 cerevisiae</i> , form spt6(236-1259)
61	d2jxca1	Alignment	not modelled	9.3	10	Fold: EF Hand-like Superfamily: EF-hand Family: Eps15 homology domain (EH domain)
62	d1jmsa1	Alignment	not modelled	9.2	4	Fold: SAM domain-like Superfamily: DNA polymerase beta, N-terminal domain-like Family: DNA polymerase beta, N-terminal domain-like
63	c2g5iB	Alignment	not modelled	8.8	12	PDB header: ligase Chain: B: PDB Molecule: aspartyl/glutamyl-trna(asn/gln) amidotransferase PDBTitle: structure of trna-dependent amidotransferase gatcab2 complexed with adp-alf4
64	c1i3oC	Alignment	not modelled	8.6	18	PDB header: apoptosis Chain: C: PDB Molecule: caspase 3; PDBTitle: crystal structure of the complex of xiap-bir2 and caspase 3
65	d2i1qa1	Alignment	not modelled	8.5	35	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
66	d1wuda1	Alignment	not modelled	8.0	16	Fold: SAM domain-like Superfamily: HRDC-like Family: HRDC domain from helicases
67	c3pc3A	Alignment	not modelled	7.9	20	PDB header: lyase Chain: A: PDB Molecule: cg1753, isoform a; PDBTitle: full length structure of cystathione beta-synthase from <i>drosophila2</i> in complex with aminoacrylate
68	c2rrdA	Alignment	not modelled	7.8	29	PDB header: dna binding protein Chain: A: PDB Molecule: hrdc domain from bloom syndrome protein; PDBTitle: structure of hrdc domain from human bloom syndrome protein, blm
69	c3sirD	Alignment	not modelled	7.8	42	PDB header: hydrolase Chain: D: PDB Molecule: caspase; PDBTitle: crystal structure of drice
70	d1wgla	Alignment	not modelled	7.8	17	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
71	c2voyB	Alignment	not modelled	7.7	31	PDB header: hydrolase Chain: B: PDB Molecule: sarcoplasmic/endoplasmic reticulum calcium PDBTitle: cryo emodel of copa, the copper transporting atpase from2 <i>archaeoglobus fulgidus</i>
72	c1uijA	Alignment	not modelled	7.6	16	PDB header: sugar binding protein Chain: A: PDB Molecule: beta subunit of beta conglycinin; PDBTitle: crystal structure of soybean beta-conglycinin beta2 homotrimer (i122m/k124w)
73	c1qdul	Alignment	not modelled	7.4	36	PDB header: hydrolase/hydrolase inhibitor Chain: I: PDB Molecule: caspase-8 alpha-chain; PDBTitle: crystal structure of the complex of caspase-8 with the tripeptide2 ketone inhibitor zevd-dcbmk
74	c2funB	Alignment	not modelled	7.4	42	PDB header: apoptosis/hydrolase Chain: B: PDB Molecule: caspase-8; PDBTitle: alternative p35-caspase-8 complex
75	c2cauA	Alignment	not modelled	7.3	9	PDB header: plant protein Chain: A: PDB Molecule: protein (canavalin); PDBTitle: canavalin from jack bean
76	d1uija2	Alignment	not modelled	7.3	15	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germinal/Seed storage 7S protein
77	c1pyoA	Alignment	not modelled	7.2	36	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: caspase-2; PDBTitle: crystal structure of human caspase-2 in complex with acetyl-leu-asp-2 glu-ser-asn-cho
78	c3a5iB	Alignment	not modelled	7.1	16	PDB header: protein transport Chain: B: PDB Molecule: flagellar biosynthesis protein flha; PDBTitle: structure of the cytoplasmic domain of flha
79	d1vzva	Alignment	not modelled	7.0	38	Fold: Herpes virus serine proteininase, assemblin Superfamily: Herpes virus serine proteininase, assemblin Family: Herpes virus serine proteininase, assemblin
80	c1wtjB	Alignment	not modelled	6.9	10	PDB header: oxidoreductase Chain: B: PDB Molecule: ureidoglycolate dehydrogenase; PDBTitle: crystal structure of delta1-piperideine-2-carboxylate2 reductase from <i>pseudomonas syringae</i> pvar.tomato PDB header: protein transport

81	c3mydA		Alignment	not modelled	6.9	18	Chain: A; PDB Molecule: flagellar biosynthesis protein flha; PDBTitle: structure of the cytoplasmic domain of flha from helicobacter pylori PDB header: oxidoreductase
82	c3i0pA		Alignment	not modelled	6.8	17	Chain: A; PDB Molecule: malate dehydrogenase; PDBTitle: crystal structure of malate dehydrogenase from entamoeba histolytica
83	c2e9qA		Alignment	not modelled	6.7	16	PDB header: plant protein Chain: A; PDB Molecule: 11s globulin subunit beta; PDBTitle: recombinant pro-11s globulin of pumpkin
84	c2d5fB		Alignment	not modelled	6.7	9	PDB header: plant protein Chain: B; PDB Molecule: glycinin a3b4 subunit; PDBTitle: crystal structure of recombinant soybean proglycinin a3b4 subunit, its2 comparison with mature glycinin a3b4 subunit, responsible for hexamer3 assembly
85	c3h11A		Alignment	not modelled	6.6	27	PDB header: apoptosis Chain: A; PDB Molecule: casp8 and fadd-like apoptosis regulator; PDBTitle: zymogen caspase-8:c-flip protease domain complex
86	d1u9la		Alignment	not modelled	6.6	30	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: NusA extra C-terminal domains
87	c3sipC		Alignment	not modelled	6.6	42	PDB header: hydrolase/ligase/hydrolase Chain: C; PDB Molecule: caspase; PDBTitle: crystal structure of drice and diap1-bir1 complex
88	d1luia		Alignment	not modelled	6.5	29	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
89	d1m6ya1		Alignment	not modelled	6.5	20	Fold: SAM domain-like Superfamily: Putative methyltransferase TM0872, insert domain Family: Putative methyltransferase TM0872, insert domain
90	c2g8yB		Alignment	not modelled	6.3	7	PDB header: oxidoreductase Chain: B; PDB Molecule: malate/l-lactate dehydrogenases; PDBTitle: the structure of a putative malate/lactate dehydrogenase from e. coli.
91	c3kgIB		Alignment	not modelled	6.3	16	PDB header: plant protein Chain: B; PDB Molecule: cruciferin; PDBTitle: crystal structure of procruciferin, 11s globulin from2 brassica napus
92	d1rvga		Alignment	not modelled	6.2	25	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class II FBP aldolase
93	c2nn3D		Alignment	not modelled	6.2	42	PDB header: hydrolase Chain: D; PDB Molecule: caspase-1; PDBTitle: structure of pro-sf-caspase-1
94	d1b22a		Alignment	not modelled	6.2	16	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
95	c1b22A		Alignment	not modelled	6.2	16	PDB header: dna binding protein Chain: A; PDB Molecule: dna repair protein rad51; PDBTitle: rad51 (n-terminal domain)
96	d1uika2		Alignment	not modelled	6.1	9	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
97	c3nn4C		Alignment	not modelled	6.1	37	PDB header: oxidoreductase Chain: C; PDB Molecule: chlorite dismutase; PDBTitle: structure of chlorite dismutase from candidatus nitrospira defluvii2 r173k mutant
98	c2k42A		Alignment	not modelled	6.1	37	PDB header: signaling protein Chain: A; PDB Molecule: wiskott-aldrich syndrome protein; PDBTitle: solution structure of the gtpase binding domain of wasp in2 complex with espfu, an ehec effector
99	c3p45I		Alignment	not modelled	6.1	45	PDB header: hydrolase Chain: I; PDB Molecule: caspase-6; PDBTitle: crystal structure of apo-caspase-6 at physiological ph