


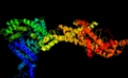

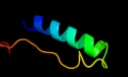




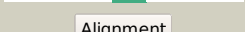

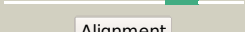

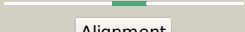

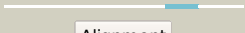

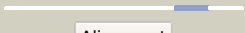


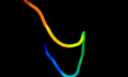


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	Q55QX6
Date	Wed Jul 10 14:11:20 BST 2013
Unique Job ID	1965ac2a29e64fe2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3p8cA_	 Alignment		100.0	89	PDB header: protein binding Chain: A; PDB Molecule: cytoplasmic fmr1-interacting protein 1; PDBTitle: structure and control of the actin regulatory wave complex
2	c3p8cB_	 Alignment		94.1	15	PDB header: protein binding Chain: B; PDB Molecule: nck-associated protein 1; PDBTitle: structure and control of the actin regulatory wave complex
3	d1ug8a_	 Alignment		49.6	23	Fold: IF3-like Superfamily: R3H domain Family: R3H domain
4	d1ayia_	 Alignment		48.0	27	Fold: Acyl carrier protein-like Superfamily: Colicin E immunity proteins Family: Colicin E immunity proteins
5	d2vlqa1	 Alignment		46.7	30	Fold: Acyl carrier protein-like Superfamily: Colicin E immunity proteins Family: Colicin E immunity proteins
6	c2no8A_	 Alignment		45.0	24	PDB header: immune system Chain: A; PDB Molecule: colicin-e2 immunity protein; PDBTitle: nmr structure analysis of the colicin immunity protein im2
7	c1i5pA_	 Alignment		43.9	10	PDB header: toxin Chain: A; PDB Molecule: pesticial crystal protein cry2aa; PDBTitle: insecticidal crystal protein cry2aa
8	d1gxha_	 Alignment		42.9	22	Fold: Acyl carrier protein-like Superfamily: Colicin E immunity proteins Family: Colicin E immunity proteins
9	c2c9kA_	 Alignment		39.4	14	PDB header: toxin Chain: A; PDB Molecule: pesticial crystal protein cry4aa; PDBTitle: structure of the functional form of the mosquito-larvicidal2 cry4aa toxin from bacillus thuringiensis at 2.8 a3 resolution
10	d1g5ma_	 Alignment		28.2	44	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
11	c2iv1J_	 Alignment		26.8	40	PDB header: lyase Chain: J; PDB Molecule: cyanate hydratase; PDBTitle: site directed mutagenesis of key residues involved in the2 catalytic mechanism of cyanase

12	c1gs0B_	Alignment		24.0	21	PDB header: transferase Chain: B: PDB Molecule: poly (adp-ribose) polymerase-2; PDBTitle: crystal structure of the catalytic fragment of murine poly2 (adp-ribose) polymerase-2
13	d1dwka2	Alignment		22.9	40	Fold: Cyanase C-terminal domain Superfamily: Cyanase C-terminal domain Family: Cyanase C-terminal domain
14	c3mhkA_	Alignment		22.0	22	PDB header: transferase Chain: A: PDB Molecule: tankyrase-2; PDBTitle: human tankyrase 2 - catalytic parp domain in complex with 2-(2-2 pyridyl)-7,8-dihydro-5h-thiino[4,3-d]pyrimidin-4-ol
15	c2wukD_	Alignment		21.1	18	PDB header: cell cycle Chain: D: PDB Molecule: septum site-determining protein diviva; PDBTitle: diviva n-terminal domain, f17a mutant
16	d2ca5a1	Alignment		20.1	16	Fold: Long alpha-hairpin Superfamily: MxiH-like Family: MxiH-like
17	d1o7xa_	Alignment		19.9	28	Fold: Citrate synthase Superfamily: Citrate synthase Family: Citrate synthase
18	d1niga_	Alignment		19.7	22	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Hypothetical protein Ta1238
19	c2paxA_	Alignment		19.6	23	PDB header: transferase Chain: A: PDB Molecule: poly(adp-ribose) polymerase; PDBTitle: the catalytic fragment of poly(adp-ribose) polymerase2 complexed with 4-amino-1,8-naphthalimide
20	d1m6ex_	Alignment		19.4	22	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Salicylic acid carboxyl methyltransferase (SAMT)
21	c2ketA_	Alignment	not modelled	18.0	50	PDB header: antibiotic Chain: A: PDB Molecule: cathelicidin-6; PDBTitle: solution structure of bmap-27
22	d1q59a_	Alignment	not modelled	17.9	10	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
23	c4dqyF_	Alignment	not modelled	17.8	26	PDB header: transferase/dna Chain: F: PDB Molecule: poly [adp-ribose] polymerase 1; PDBTitle: structure of human parp-1 bound to a dna double strand break
24	d1i5pa3	Alignment	not modelled	17.6	11	Fold: Toxins' membrane translocation domains Superfamily: delta-Endotoxin (insectocide), N-terminal domain Family: delta-Endotoxin (insectocide), N-terminal domain
25	c2i3sF_	Alignment	not modelled	17.2	50	PDB header: cell cycle Chain: F: PDB Molecule: checkpoint serine/threonine-protein kinase; PDBTitle: bub3 complex with bub1 glebs motif
26	c2i68B_	Alignment	not modelled	15.8	31	PDB header: transport protein Chain: B: PDB Molecule: protein emre; PDBTitle: cryo-em based theoretical model structure of transmembrane2 domain of the multidrug-resistance antiporter from e. coli3 emre
27	c4h15A_	Alignment	not modelled	14.5	26	PDB header: transferase Chain: A: PDB Molecule: tankyrase-2; PDBTitle: complex structure of human tankyrase 2 with 7-hydroxy -4'-2 methoxyflavone
28	c1dlcA_	Alignment	not modelled	14.5	11	PDB header: toxin Chain: A: PDB Molecule: delta-endotoxin cryiia; PDBTitle: crystal structure of insecticidal delta-endotoxin from2 bacillus thuringiensis at 2.5 angstroms resolution

29	c2p7nA	Alignment	not modelled	14.3	13	PDB header: cell invasion Chain: A: PDB Molecule: pathogenicity island 1 effector protein; PDBTitle: crystal structure of the pathogenicity island 1 effector2 protein from chromobacterium violaceum. northeast3 structural genomics consortium (nesgc) target cvr69.
30	c3b5iB	Alignment	not modelled	13.4	10	PDB header: transferase Chain: B: PDB Molecule: s-adenosyl-l-methionine:salicylic acid carboxyl PDBTitle: crystal structure of indole-3-acetic acid methyltransferase
31	c1rpqW	Alignment	not modelled	12.0	38	PDB header: membrane protein Chain: W: PDB Molecule: peptide e131; PDBTitle: high affinity ige receptor (alpha chain) complexed with tight-binding2 e131 'zeta' peptide from phage display
32	d1zy3a1	Alignment	not modelled	11.8	24	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
33	d1alua	Alignment	not modelled	11.6	9	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Long-chain cytokines
34	c3c4hA	Alignment	not modelled	11.3	24	PDB header: transferase Chain: A: PDB Molecule: poly(adp-ribose) polymerase 3; PDBTitle: human poly(adp-ribose) polymerase 3, catalytic fragment in complex2 with an inhibitor dr2313
35	d2rd6a2	Alignment	not modelled	11.2	26	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: Poly(ADP-ribose) polymerase, C-terminal domain
36	c2lhuA	Alignment	not modelled	11.2	36	PDB header: structural protein Chain: A: PDB Molecule: mybpc3 protein; PDBTitle: structural insight into the unique cardiac myosin binding protein-c2 motif: a partially folded domain
37	c2xa0A	Alignment	not modelled	10.7	33	PDB header: apoptosis Chain: A: PDB Molecule: apoptosis regulator bcl-2; PDBTitle: crystal structure of bcl-2 in complex with a bax bh32 peptide
38	c2lruA	Alignment	not modelled	10.2	29	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase wnk1; PDBTitle: solution structure of the wnk1 autoinhibitory domain
39	c2vm6A	Alignment	not modelled	10.1	35	PDB header: immune system Chain: A: PDB Molecule: bcl-2-related protein a1; PDBTitle: human bcl2-a1 in complex with bim-bh3 peptide
40	c1vgmB	Alignment	not modelled	10.0	28	PDB header: transferase Chain: B: PDB Molecule: 378aa long hypothetical citrate synthase; PDBTitle: crystal structure of an isozyme of citrate synthase from sulfolbus2 tokodaii strain7
41	d1bxla	Alignment	not modelled	9.6	29	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
42	c2h12C	Alignment	not modelled	9.4	13	PDB header: transferase Chain: C: PDB Molecule: citrate synthase; PDBTitle: structure of acetobacter aceti citrate synthase complexed2 with oxaloacetate and carboxymethyldethia coenzyme a (cmx)
43	d1jbob	Alignment	not modelled	9.4	29	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
44	d1cpca	Alignment	not modelled	9.1	21	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
45	c2o2fA	Alignment	not modelled	9.0	33	PDB header: apoptosis Chain: A: PDB Molecule: apoptosis regulator bcl-2; PDBTitle: solution structure of the anti-apoptotic protein bcl-2 in2 complex with an acyl-sulfonamide-based ligand
46	d1f99a	Alignment	not modelled	8.9	21	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
47	c2r26C	Alignment	not modelled	8.9	28	PDB header: transferase Chain: C: PDB Molecule: citrate synthase; PDBTitle: the structure of the ternary complex of carboxymethyl2 coenzyme a and oxalateacetate with citrate synthase from3 the thermophilic archaeonthermoplasma acidophilum
48	c3msuA	Alignment	not modelled	8.8	16	PDB header: transferase Chain: A: PDB Molecule: citrate synthase; PDBTitle: crystal structure of citrate synthase from francisella tularensis
49	d1eyxb	Alignment	not modelled	8.8	18	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
50	d1qzga	Alignment	not modelled	8.3	29	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Single strand DNA-binding domain, SSB
51	c3pmdA	Alignment	not modelled	8.3	45	PDB header: lipid binding protein Chain: A: PDB Molecule: conserved domain protein; PDBTitle: crystal structure of the sporulation inhibitor pxo1-118 from bacillus2 anthracis
52	d1kzyc2	Alignment	not modelled	8.3	38	Fold: BRCT domain Superfamily: BRCT domain Family: 53BP1
53	c3ongA	Alignment	not modelled	8.2	14	PDB header: ligase Chain: A: PDB Molecule: ubiquitin-activating enzyme e1-like; PDBTitle: crystal structure of uba2ufd-ubc9: insights into e1-e2 interactions in2 sumo pathways
54	c2dlrA	Alignment	not modelled	8.2	11	PDB header: signaling protein Chain: A: PDB Molecule: regulator of g-protein signaling 10; PDBTitle: solution structure of the rgs domain of human regulator of2 g-protein signaling 10

55	dlysga1	Alignment	not modelled	8.1	29	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
56	d1pq1a_	Alignment	not modelled	7.9	29	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
57	c2pfcA_	Alignment	not modelled	7.8	46	PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein rv0098/mt0107; PDBTitle: structure of mycobacterium tuberculosis rv0098
58	c2vtgA_	Alignment	not modelled	7.8	14	PDB header: metal-binding protein Chain: A: PDB Molecule: ionized calcium-binding adapter molecule 2; PDBTitle: crystal structure of human iba2, trigonal crystal form
59	d1miau1	Alignment	not modelled	7.7	22	Fold: BRCA2 helical domain Superfamily: BRCA2 helical domain Family: BRCA2 helical domain
60	c2dw3A_	Alignment	not modelled	7.5	43	PDB header: photosynthesis Chain: A: PDB Molecule: intrinsic membrane protein pufx; PDBTitle: solution structure of the rhodobacter sphaeroides pufx2 membrane protein
61	d1efya2	Alignment	not modelled	7.5	23	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: Poly(ADP-ribose) polymerase, C-terminal domain
62	d1o0la_	Alignment	not modelled	7.4	25	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
63	d1dlca3	Alignment	not modelled	7.4	11	Fold: Toxins' membrane translocation domains Superfamily: delta-Endotoxin (insectocide), N-terminal domain Family: delta-Endotoxin (insectocide), N-terminal domain
64	c1rpqZ_	Alignment	not modelled	7.1	38	PDB header: membrane protein Chain: Z: PDB Molecule: peptide e131; PDBTitle: high affinity ige receptor (alpha chain) complexed with tight-binding2 e131 'zeta' peptide from phage display
65	d1jboa_	Alignment	not modelled	6.9	19	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
66	d1e5xa_	Alignment	not modelled	6.8	17	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
67	d1k3pa_	Alignment	not modelled	6.8	22	Fold: Citrate synthase Superfamily: Citrate synthase Family: Citrate synthase
68	c2rf5A_	Alignment	not modelled	6.8	24	PDB header: transferase Chain: A: PDB Molecule: tankyrase-1; PDBTitle: crystal structure of human tankyrase 1- catalytic parp domain
69	c2y9zB_	Alignment	not modelled	6.8	19	PDB header: transcription Chain: B: PDB Molecule: iswi one complex protein 3; PDBTitle: chromatin remodeling factor isw1a(del_atpase) in dna complex
70	c3thzA_	Alignment	not modelled	6.8	25	PDB header: dna binding protein/dna Chain: A: PDB Molecule: dna mismatch repair protein msh2; PDBTitle: human mutsbeta complexed with an idl of 6 bases (loop6) and adp
71	d1jc2a_	Alignment	not modelled	6.5	20	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
72	c1jc2A_	Alignment	not modelled	6.5	20	PDB header: structural protein Chain: A: PDB Molecule: troponin c, skeletal muscle; PDBTitle: complex of the c-domain of troponin c with residues 1-40 of2 troponin i
73	d1g73a_	Alignment	not modelled	6.5	14	Fold: Spectrin repeat-like Superfamily: Smac/diablo Family: Smac/diablo
74	c3oqhB_	Alignment	not modelled	6.5	20	PDB header: ligase Chain: B: PDB Molecule: putative uncharacterized protein yvmc; PDBTitle: crystal structure of b. licheniformis cdps yvmc-blic
75	c1kcoA_	Alignment	not modelled	6.4	38	PDB header: protein binding Chain: A: PDB Molecule: e131 zeta peptide; PDBTitle: structure of e131 zeta peptide, a potent antagonist of the2 high-affinity ige receptor
76	d1jlja_	Alignment	not modelled	6.4	18	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Short-chain cytokines
77	c4aj5B_	Alignment	not modelled	6.4	13	PDB header: cell cycle Chain: B: PDB Molecule: spindle and kinetochore-associated protein 1; PDBTitle: crystal structure of the ska core complex
78	c4d8mA_	Alignment	not modelled	6.4	16	PDB header: lipid binding protein Chain: A: PDB Molecule: pesticidal crystal protein cry5ba; PDBTitle: crystal structure of bacillus thuringiensis cry5b nematocidal toxin
79	c2zbcA_	Alignment	not modelled	6.3	13	PDB header: isomerase Chain: A: PDB Molecule: type ii dna topoisomerase vi subunit a; PDBTitle: crystal structure of an intact type ii dna topoisomerase:2 insights into dna transfer mechanisms
80	c1ji6A_	Alignment	not modelled	6.3	11	PDB header: toxin Chain: A: PDB Molecule: pesticidal crystal protein cry3bb; PDBTitle: crystal structure of the insecticidal bacterial del2 endotoxin cry3bb1 bacillus thuringiensis
						Fold: Ribosomal protein S5 domain 2-like

81	d2hkja2	Alignment	not modelled	6.3	22	Superfamily: Ribosomal protein S5 domain 2-like Family: DNA gyrase/MutL, second domain
82	d1vp7a_	Alignment	not modelled	6.3	22	Fold: Spectrin repeat-like Superfamily: XseB-like Family: XseB-like
83	c2lsyA_	Alignment	not modelled	6.2	24	PDB header: protein binding Chain: A: PDB Molecule: dna repair protein rev1; PDBTitle: structure of the c-terminal domain from human rev1
84	c1lyjB_	Alignment	not modelled	6.2	23	PDB header: gene regulation/antitumor protein Chain: B: PDB Molecule: breast cancer susceptibility; PDBTitle: structure of a brca2-dss1 complex
85	c4exmB_	Alignment	not modelled	6.1	23	PDB header: toxin, hydrolase Chain: B: PDB Molecule: pesticin, lysozyme chimera; PDBTitle: the crystal structure of an engineered phage lysin containing the2 binding domain of pesticin and the killing domain of t4-lysozyme
86	d1gs0a2	Alignment	not modelled	6.1	18	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: Poly(ADP-ribose) polymerase, C-terminal domain
87	c1wpaA_	Alignment	not modelled	6.1	12	PDB header: cell adhesion Chain: A: PDB Molecule: occludin; PDBTitle: 1.5 angstrom crystal structure of human occludin fragment2 413-522
88	c2jrza_	Alignment	not modelled	6.1	16	PDB header: oxidoreductase Chain: A: PDB Molecule: histone demethylase jarid1c; PDBTitle: solution structure of the bright/arid domain from the human2 jarid1c protein.
89	d2ponb1	Alignment	not modelled	6.0	29	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
90	d1fewa_	Alignment	not modelled	6.0	14	Fold: Spectrin repeat-like Superfamily: Smac/diablo Family: Smac/diablo
91	d1vp7b_	Alignment	not modelled	6.0	22	Fold: Spectrin repeat-like Superfamily: XseB-like Family: XseB-like
92	c4i5nE_	Alignment	not modelled	5.9	14	PDB header: hydrolase/toxin Chain: E: PDB Molecule: serine/threonine-protein phosphatase 2a regulatory subunit PDBTitle: structural mechanism of trimeric pp2a holoenzyme involving pr70:2 insight for cdc6 dephosphorylation
93	c1rpgX_	Alignment	not modelled	5.9	38	PDB header: membrane protein Chain: X: PDB Molecule: peptide e131; PDBTitle: high affinity ige receptor (alpha chain) complexed with tight-binding2 e131 'zeta' peptide from phage display
94	d1alla_	Alignment	not modelled	5.8	22	Fold: Globin-like Superfamily: Globin-like Family: Phycocyanin-like phycobilisome proteins
95	d1t1va_	Alignment	not modelled	5.8	10	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: SH3BGR (SH3-binding, glutamic acid-rich protein-like)
96	c2lsjA_	Alignment	not modelled	5.7	24	PDB header: protein binding/protein binding Chain: A: PDB Molecule: dna repair protein rev1; PDBTitle: solution structure of the mouse rev1 ctd in complex with the rev1-2 interacting region (rir)of pol kappa
97	c1ykuB_	Alignment	not modelled	5.7	36	PDB header: unknown function Chain: B: PDB Molecule: hypothetical protein pxo2-61; PDBTitle: crystal structure of a sensor domain homolog
98	c3eb7B_	Alignment	not modelled	5.6	14	PDB header: toxin Chain: B: PDB Molecule: insecticidal delta-endotoxin cry8ea1; PDBTitle: crystal structure of insecticidal delta-endotoxin cry8ea1 from2 bacillus thuringiensis at 2.2 angstroms resolution
99	d1ioma_	Alignment	not modelled	5.6	19	Fold: Citrate synthase Superfamily: Citrate synthase Family: Citrate synthase