












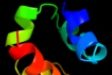



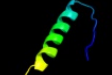




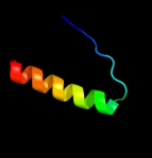


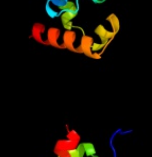
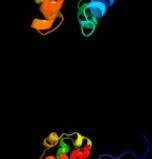



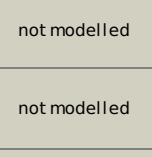


Phyre2


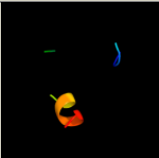
Email	I.a.kelley@imperial.ac.uk
Description	O15350
Date	Thu Apr 26 09:24:59 BST 2012
Unique Job ID	685bf8351938467f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2rmnA_	 Alignment		100.0	77	PDB header: cell cycle, antitumor protein Chain: A: PDB Molecule: tumor protein 63; PDBTitle: the solution structure of the p63 dna-binding domain
2	c2xipA_	 Alignment		100.0	98	PDB header: cell cycle Chain: A: PDB Molecule: tumour protein p73; PDBTitle: crystal structure of the dna binding domain of human tp732 refined at 1.8 a resolution
3	c2j1xA_	 Alignment		100.0	59	PDB header: nuclear protein Chain: A: PDB Molecule: cellular tumor antigen p53; PDBTitle: human p53 core domain mutant m133l-v203a-y220c-n239y-n268d
4	d2ac0a1	 Alignment		100.0	59	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: p53-like transcription factors Family: p53 DNA-binding domain-like
5	d1hu8a_	 Alignment		100.0	60	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: p53-like transcription factors Family: p53 DNA-binding domain-like
6	d1rg6a_	 Alignment		99.9	49	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
7	d1dxsa_	 Alignment		99.9	100	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
8	c4a9zD_	 Alignment		99.6	59	PDB header: transcription Chain: D: PDB Molecule: tumor protein 63; PDBTitle: crystal structure of human p63 tetramerization domain
9	c2wttL_	 Alignment		99.6	96	PDB header: transcription Chain: L: PDB Molecule: tumor protein p73; PDBTitle: structure of the human p73 tetramerization domain (crystal2 form ii)
10	d1coka_	 Alignment		99.5	100	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
11	c3zy1A_	 Alignment		99.5	55	PDB header: transcription Chain: A: PDB Molecule: tumor protein 63; PDBTitle: crystal structure of the human p63 tetramerization domain

12	c2wqjM_	Alignment		98.5	100	PDB header: transcription Chain: M: PDB Molecule: tumor protein p73; PDBTitle: crystal structure of a truncated variant of the human p732 tetramerization domain
13	c2l14B_	Alignment		98.3	24	PDB header: protein binding Chain: B: PDB Molecule: cellular tumor antigen p53; PDBTitle: structure of cbp nuclear coactivator binding domain in complex with2 p53 tad
14	d3saka_	Alignment		98.3	44	Fold: p53 tetramerization domain Superfamily: p53 tetramerization domain Family: p53 tetramerization domain
15	d1b0xa_	Alignment		98.2	17	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
16	c1b0xA_	Alignment		98.2	17	PDB header: transferase Chain: A: PDB Molecule: protein (epha4 receptor tyrosine kinase); PDBTitle: the crystal structure of an eph receptor sam domain reveals2 a mechanism for modular dimerization.
17	c2e8nA_	Alignment		98.2	18	PDB header: transferase, signaling protein Chain: A: PDB Molecule: ephrin type-a receptor 2; PDBTitle: solution structure of the c-terminal sam-domain of ephaa2:2 ephrin type-a receptor 2 precursor (ec 2.7.10.1)
18	c2eaoA_	Alignment		98.2	17	PDB header: signaling protein, transferase Chain: A: PDB Molecule: ephrin type-b receptor 1; PDBTitle: solution structure of the c-terminal sam-domain of mouse2 ephrin type-b receptor 1 precursor (ec 2.7.1.112)
19	d1t4wa_	Alignment		98.2	23	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: p53-like transcription factors Family: p53 DNA-binding domain-like
20	c3h8mB_	Alignment		98.2	22	PDB header: transferase Chain: B: PDB Molecule: ephrin type-a receptor 7; PDBTitle: sam domain of human ephrin type-a receptor 7 (epha7)
21	d1sgga_	Alignment	not modelled	98.2	17	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
22	c2kg5A_	Alignment	not modelled	98.1	24	PDB header: signaling protein Chain: A: PDB Molecule: arf-gap, rho-gap domain, ank repeat and ph PDBTitle: nmr solution structure of arap3-sam
23	d1b4fa_	Alignment	not modelled	98.0	17	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
24	c3kkaD_	Alignment	not modelled	98.0	19	PDB header: transferase Chain: D: PDB Molecule: ephrin type-a receptor 2; PDBTitle: co-crystal structure of the sam domains of epha1 and epha2
25	c3senD_	Alignment	not modelled	98.0	19	PDB header: signaling protein Chain: D: PDB Molecule: caskin-1; PDBTitle: structure of caskin1 tandem sams
26	d1v38a_	Alignment	not modelled	98.0	17	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
27	c2dl0A_	Alignment	not modelled	98.0	17	PDB header: signaling protein Chain: A: PDB Molecule: sam and sh3 domain-containing protein 1; PDBTitle: solution structure of the sam-domain of the sam and sh32 domain containing protein 1
28	d1x40a1	Alignment	not modelled	98.0	18	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain PDB header: structural protein

29	c3k1rB_	Alignment	not modelled	97.9	17	Chain: B: PDB Molecule: usher syndrome type-1g protein; PDBTitle: structure of harmonin npdz1 in complex with the sam-pbm of2 sans
30	c3hi1B_	Alignment	not modelled	97.9	25	PDB header: transferase Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: sam domain of human ephrin type-a receptor 1 (epha1)
31	d1ucva_	Alignment	not modelled	97.9	17	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
32	c2eamA_	Alignment	not modelled	97.8	19	PDB header: signaling protein Chain: A: PDB Molecule: putative 47 kda protein; PDBTitle: solution structure of the n-terminal sam-domain of a human2 putative 47 kda protein
33	c2fe9A_	Alignment	not modelled	97.8	15	PDB header: rna binding protein Chain: A: PDB Molecule: protein vts1; PDBTitle: solution structure of the vts1 sam domain in the presence2 of rna
34	d1ow5a_	Alignment	not modelled	97.8	24	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
35	c1ow5A_	Alignment	not modelled	97.8	24	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase ste11; PDBTitle: nmr structure of the saccharomyces cerevisiae sam (sterile2 alpha motif) domain
36	c2k4pA_	Alignment	not modelled	97.8	19	PDB header: signaling protein Chain: A: PDB Molecule: phosphatidylinositol-3,4,5-trisphosphate 5- PDBTitle: solution structure of ship2-sam
37	c2lmrA_	Alignment	not modelled	97.8	20	PDB header: signaling protein Chain: A: PDB Molecule: ankyrin repeat and sam domain-containing protein 1a; PDBTitle: solution structure of the first sam domain of odin
38	c1oxjA_	Alignment	not modelled	97.6	16	PDB header: rna binding protein Chain: A: PDB Molecule: rna-binding protein smaug; PDBTitle: crystal structure of the smaug rna binding domain
39	c2kivA_	Alignment	not modelled	97.6	21	PDB header: signaling protein Chain: A: PDB Molecule: ankyrin repeat and sterile alpha motif domain- PDBTitle: aida-1 sam domain tandem
40	c2ke7A_	Alignment	not modelled	97.6	19	PDB header: protein binding Chain: A: PDB Molecule: ankyrin repeat and sterile alpha motif domain- PDBTitle: nmr structure of the first sam domain from aida1
41	d1hs5a_	Alignment	not modelled	97.6	45	Fold: p53 tetramerization domain Superfamily: p53 tetramerization domain Family: p53 tetramerization domain
42	d1aiea_	Alignment	not modelled	97.6	48	Fold: p53 tetramerization domain Superfamily: p53 tetramerization domain Family: p53 tetramerization domain
43	d1oxja1	Alignment	not modelled	97.6	16	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
44	c2qkqA_	Alignment	not modelled	97.5	19	PDB header: transferase Chain: A: PDB Molecule: ephrin type-b receptor 4; PDBTitle: structure of the sam domain of human ephrin type-b receptor2 4
45	d1a1ua_	Alignment	not modelled	97.4	44	Fold: p53 tetramerization domain Superfamily: p53 tetramerization domain Family: p53 tetramerization domain
46	c3bq7A_	Alignment	not modelled	97.4	20	PDB header: transferase Chain: A: PDB Molecule: diacylglycerol kinase delta; PDBTitle: sam domain of diacylglycerol kinase delta1 (e35g)
47	c2j10A_	Alignment	not modelled	97.4	44	PDB header: transcription Chain: A: PDB Molecule: cellular tumor antigen p53; PDBTitle: p53 tetramerization domain mutant t329f q331k
48	c2j10D_	Alignment	not modelled	97.4	44	PDB header: transcription Chain: D: PDB Molecule: cellular tumor antigen p53; PDBTitle: p53 tetramerization domain mutant t329f q331k
49	c2j10B_	Alignment	not modelled	97.4	44	PDB header: transcription Chain: B: PDB Molecule: cellular tumor antigen p53; PDBTitle: p53 tetramerization domain mutant t329f q331k
50	c2b6gA_	Alignment	not modelled	97.4	13	PDB header: rna binding protein Chain: A: PDB Molecule: vts1p; PDBTitle: rna recognition by the vts1 sam domain
51	c2j11D_	Alignment	not modelled	97.4	44	PDB header: transcription Chain: D: PDB Molecule: cellular tumor antigen p53; PDBTitle: p53 tetramerization domain mutant y327s t329g q331g
52	c3zy0C_	Alignment	not modelled	97.3	62	PDB header: transcription Chain: C: PDB Molecule: tumor protein p63; PDBTitle: crystal structure of a truncated variant of the human p632 tetramerization domain lacking the c-terminal helix
53	c2gleA_	Alignment	not modelled	97.2	24	PDB header: protein binding Chain: A: PDB Molecule: neurabin-1; PDBTitle: solution structure of neurabin sam domain
54	c2eseA_	Alignment	not modelled	97.2	12	PDB header: protein/rna complex Chain: A: PDB Molecule: vts1p; PDBTitle: structure of the sam domain of vts1p in complex with rna
55	d2f3na1	Alignment	not modelled	97.1	25	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain PDB header: transferase/transcription

56	c2k8fB_	Alignment	not modelled	96.8	29	Chain: B: PDB Molecule: cellular tumor antigen p53; PDBTitle: structural basis for the regulation of p53 function by p300
57	d1wwva1	Alignment	not modelled	96.3	22	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
58	c3bs5A_	Alignment	not modelled	96.1	15	PDB header: signaling protein/membrane protein Chain: A: PDB Molecule: protein aveugle; PDBTitle: crystal structure of hcnk2-san/dhpy-sam complex
59	c2dkzA_	Alignment	not modelled	96.0	21	PDB header: signaling protein Chain: A: PDB Molecule: hypothetical protein loc64762; PDBTitle: solution structure of the sam_pnt-domain of the2 hypothetical protein loc64762
60	c3bs7A_	Alignment	not modelled	95.8	15	PDB header: signaling protein Chain: A: PDB Molecule: protein aveugle; PDBTitle: crystal structure of the sterile alpha motif (sam) domain2 of hyphen/aveugle
61	c2eanA_	Alignment	not modelled	95.7	19	PDB header: signaling protein Chain: A: PDB Molecule: connector enhancer of kinase suppressor of ras 2; PDBTitle: solution structure of the n-terminal sam-domain of human2 kiaa0902 protein (connector enhancer of kinase suppressor3 of ras 2)
62	d1pk1c1	Alignment	not modelled	95.3	18	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
63	c1v85A_	Alignment	not modelled	95.1	26	PDB header: apoptosis Chain: A: PDB Molecule: similar to ring finger protein 36; PDBTitle: sterile alpha motif (sam) domain of mouse bifunctional2 apoptosis regulator
64	d1pk3a1	Alignment	not modelled	94.9	9	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
65	d1kw4a_	Alignment	not modelled	94.7	19	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
66	c1pk1A_	Alignment	not modelled	94.6	20	PDB header: transcription repression Chain: A: PDB Molecule: polyhomeotic-proximal chromatin protein; PDBTitle: hetero sam domain structure of ph and scm.
67	c2e8oA_	Alignment	not modelled	93.7	19	PDB header: signaling protein Chain: A: PDB Molecule: sam domain and hd domain-containing protein 1; PDBTitle: solution structure of the n-terminal sam-domain of the sam2 domain and hd domain containing protein 1 (dendritic cell-3 derived ifng-induced protein) (dcip) (monocyte protein 5)4 (mop-5)
68	c1pk1B_	Alignment	not modelled	92.6	9	PDB header: transcription repression Chain: B: PDB Molecule: sex comb on midleg cg9495-pa; PDBTitle: hetero sam domain structure of ph and scm.
69	c1q2iA_	Alignment	not modelled	90.9	43	PDB header: anti tumor protein Chain: A: PDB Molecule: pnc27; PDBTitle: nmr solution structure of a peptide from the mdm-2 binding2 domain of the p53 protein that is selectively cytotoxic to3 cancer cells
70	c215yA_	Alignment	not modelled	88.6	17	PDB header: signaling protein Chain: A: PDB Molecule: stromal interaction molecule 2; PDBTitle: nmr structure of calcium-loaded stim2 ef-sam.
71	d1luqva_	Alignment	not modelled	87.4	6	Fold: SAM domain-like Superfamily: SAM/Pointed domain Family: SAM (sterile alpha motif) domain
72	c3dacB_	Alignment	not modelled	80.9	38	PDB header: cell cycle Chain: B: PDB Molecule: cellular tumor antigen p53; PDBTitle: structure of the human mdmx protein bound to the p53 tumor2 suppressor transactivation domain
73	c3if8B_	Alignment		78.1	23	PDB header: cell cycle Chain: B: PDB Molecule: protein zwilch homolog; PDBTitle: crystal structure of zwilch, a member of the rzz kinetochore complex
74	c3dacP_	Alignment	not modelled	74.2	42	PDB header: cell cycle Chain: P: PDB Molecule: cellular tumor antigen p53; PDBTitle: structure of the human mdmx protein bound to the p53 tumor2 suppressor transactivation domain
75	c2k60A_	Alignment	not modelled	68.5	19	PDB header: signaling protein Chain: A: PDB Molecule: protein (stromal interaction molecule 1); PDBTitle: nmr structure of calcium-loaded stim1 ef-sam
76	c2xseA_	Alignment		58.9	56	PDB header: oxidoreductase Chain: A: PDB Molecule: thymine dioxygenase jbp1; PDBTitle: the structural basis for recognition of j-base containing2 dna by a novel dna-binding domain in jbp1
77	c2rp5A_	Alignment	not modelled	53.5	19	PDB header: transcription Chain: A: PDB Molecule: putative uncharacterized protein cep-1; PDBTitle: solution structure of the oligomerization domain in cep-1
78	c3nb2B_	Alignment	not modelled	53.2	19	PDB header: ligase Chain: B: PDB Molecule: secreted effector protein; PDBTitle: crystal structure of e. coli o157:h7 effector protein nlel
79	d2aq0a1	Alignment	not modelled	48.3	12	Fold: SAM domain-like Superfamily: RuvA domain 2-like

				Family:Hef domain-like		
80	c2b3gB_	Alignment	not modelled	42.3	25	PDB header: replication Chain: B: PDB Molecule: cellular tumor antigen p53; PDBTitle: p53n (fragment 33-60) bound to rpa70n
81	d1b22a_	Alignment	not modelled	42.1	14	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
82	c1b22A_	Alignment	not modelled	42.1	14	PDB header: dna binding protein Chain: A: PDB Molecule: dna repair protein rad51; PDBTitle: rad51 (n-terminal domain)
83	c2qzaA_	Alignment	not modelled	39.6	15	PDB header: ligase Chain: A: PDB Molecule: secreted effector protein; PDBTitle: crystal structure of salmonella effector protein sopa
84	c2xdvA_	Alignment	not modelled	32.7	25	PDB header: nuclear protein Chain: A: PDB Molecule: myc-induced nuclear antigen; PDBTitle: crystal structure of the catalytic domain of flj14393
85	c4digA_	Alignment	not modelled	32.5	25	PDB header: oxidoreductase Chain: A: PDB Molecule: lysine-specific demethylase no66; PDBTitle: crystal structure of human no66
86	d1szpa1	Alignment	not modelled	32.5	14	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
87	c3gycB_	Alignment	not modelled	29.1	57	PDB header: hydrolase Chain: B: PDB Molecule: putative glycoside hydrolase; PDBTitle: crystal structure of putative glycoside hydrolase (yp_001304622.1)2 from parabacteroides distasonis atcc 8503 at 1.85 a resolution
88	c3cguB_	Alignment	not modelled	23.2	44	PDB header: hormone/signaling protein Chain: B: PDB Molecule: protein giant-lens; PDBTitle: crystal structure of unliganded argos
89	c1v9pB_	Alignment	not modelled	21.6	21	PDB header: ligase Chain: B: PDB Molecule: dna ligase; PDBTitle: crystal structure of nad+-dependent dna ligase
90	d2gsca1	Alignment	not modelled	19.5	22	Fold: Bromodomain-like Superfamily: IVS-encoded protein-like Family: IVS-encoded protein-like
91	d1vrba1	Alignment	not modelled	18.5	13	Fold: Double-stranded beta-helix Superfamily: Clavaminate synthase-like Family: Asparaginyl hydroxylase-like
92	c3kf6A_	Alignment	not modelled	17.3	7	PDB header: structural protein Chain: A: PDB Molecule: protein stn1; PDBTitle: crystal structure of s. pombe stn1-ten1 complex
93	d1zeta2	Alignment	not modelled	16.9	23	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
94	d2i1qa1	Alignment	not modelled	16.5	21	Fold: SAM domain-like Superfamily: Rad51 N-terminal domain-like Family: DNA repair protein Rad51, N-terminal domain
95	c3qw1A_	Alignment	not modelled	16.1	33	PDB header: hydrolase activator Chain: A: PDB Molecule: tbc1 domain family member 7; PDBTitle: crystal structure of human tbc1 domain family member 7
96	c3c1zA_	Alignment	not modelled	16.0	19	PDB header: dna binding protein Chain: A: PDB Molecule: dna integrity scanning protein disa; PDBTitle: structure of the ligand-free form of a bacterial dna damage2 sensor protein
97	c2p3fN_	Alignment	not modelled	15.4	33	PDB header: hydrolase Chain: N: PDB Molecule: anti-coagulant protein 5; PDBTitle: crystal structure of the factor xa/nap5 complex
98	d1lb2b_	Alignment	not modelled	15.0	17	Fold: SAM domain-like Superfamily: C-terminal domain of RNA polymerase alpha subunit Family: C-terminal domain of RNA polymerase alpha subunit
99	c3lk2B_	Alignment	not modelled	14.8	25	PDB header: protein binding Chain: B: PDB Molecule: f-actin-capping protein subunit beta isoforms 1 and 2; PDBTitle: crystal structure of capz bound to the uncapping motif from carmil