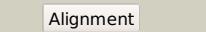
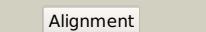
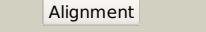
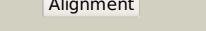
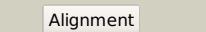
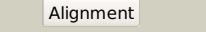
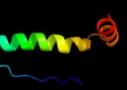
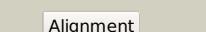
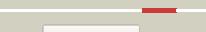
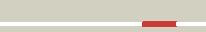
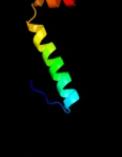
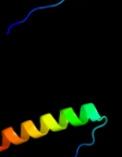
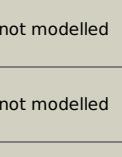


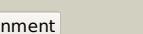
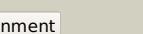
# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P02340
Date	Tue Jul 30 12:57:01 BST 2013
Unique Job ID	b848bad981392610

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3q06B_			100.0	86	<b>PDB header:</b> cell cycle/dna <b>Chain:</b> B; <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> an induced fit mechanism regulates p53 dna binding kinetics to confer2 sequence specificity
2	c2rmnA_			100.0	51	<b>PDB header:</b> cell cycle, antitumor protein <b>Chain:</b> A; <b>PDB Molecule:</b> tumor protein 63; <b>PDBTitle:</b> the solution structure of the p63 dna-binding domain
3	c2j1xA_			100.0	88	<b>PDB header:</b> nuclear protein <b>Chain:</b> A; <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> human p53 core domain mutant m133l-v203a-y220c-n239y-n268d
4	d2ac0a1			100.0	89	<b>Fold:</b> Common fold of diphtheria toxin/transcription factors/cytochrome f <b>Superfamily:</b> p53-like transcription factors <b>Family:</b> p53 DNA-binding domain-like
5	c2xipA_			100.0	57	<b>PDB header:</b> cell cycle <b>Chain:</b> A; <b>PDB Molecule:</b> tumour protein p73; <b>PDBTitle:</b> crystal structure of the dna binding domain of human tp732 refined at 1.8 a resolution
6	d1hu8a_			100.0	99	<b>Fold:</b> Common fold of diphtheria toxin/transcription factors/cytochrome f <b>Superfamily:</b> p53-like transcription factors <b>Family:</b> p53 DNA-binding domain-like
7	c4a9zD_			99.3	31	<b>PDB header:</b> transcription <b>Chain:</b> D; <b>PDB Molecule:</b> tumor protein 63; <b>PDBTitle:</b> crystal structure of human p63 tetramerization domain
8	c4a9zC_			99.3	31	<b>PDB header:</b> transcription <b>Chain:</b> C; <b>PDB Molecule:</b> tumor protein 63; <b>PDBTitle:</b> crystal structure of human p63 tetramerization domain
9	c3zy1A_			99.3	30	<b>PDB header:</b> transcription <b>Chain:</b> A; <b>PDB Molecule:</b> tumor protein 63; <b>PDBTitle:</b> crystal structure of the human p63 tetramerization domain
10	c2wttL_			99.2	30	<b>PDB header:</b> transcription <b>Chain:</b> L; <b>PDB Molecule:</b> tumor protein p73; <b>PDBTitle:</b> structure of the human p73 tetramerization domain (crystal2 form ii)
11	d3saka_			99.2	86	<b>Fold:</b> p53 tetramerization domain <b>Superfamily:</b> p53 tetramerization domain <b>Family:</b> p53 tetramerization domain

12	<a href="#">c2wttN_</a>	Alignment		99.0	32	<b>PDB header:</b> transcription <b>Chain:</b> N: <b>PDB Molecule:</b> tumor protein p73; <b>PDBTitle:</b> structure of the human p73 tetramerization domain (crystal2 form ii)
13	<a href="#">c2wttH_</a>	Alignment		99.0	32	<b>PDB header:</b> transcription <b>Chain:</b> H: <b>PDB Molecule:</b> tumor protein p73; <b>PDBTitle:</b> structure of the human p73 tetramerization domain (crystal2 form ii)
14	<a href="#">c2wqjK_</a>	Alignment		98.6	43	<b>PDB header:</b> transcription <b>Chain:</b> K: <b>PDB Molecule:</b> tumor protein p73; <b>PDBTitle:</b> crystal structure of a truncated variant of the human p73 tetramerization domain
15	<a href="#">d1t4wa_</a>	Alignment		98.6	21	<b>Fold:</b> Common fold of diphtheria toxin/transcription factors/cytochrome f <b>Superfamily:</b> p53-like transcription factors <b>Family:</b> p53 DNA-binding domain-like
16	<a href="#">c2k8fB_</a>	Alignment		98.6	72	<b>PDB header:</b> transferase/transcription <b>Chain:</b> B: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> structural basis for the regulation of p53 function by p300
17	<a href="#">d1hs5a_</a>	Alignment		98.6	79	<b>Fold:</b> p53 tetramerization domain <b>Superfamily:</b> p53 tetramerization domain <b>Family:</b> p53 tetramerization domain
18	<a href="#">d1aiae_</a>	Alignment		98.4	87	<b>Fold:</b> p53 tetramerization domain <b>Superfamily:</b> p53 tetramerization domain <b>Family:</b> p53 tetramerization domain
19	<a href="#">c2j10B_</a>	Alignment		98.3	87	<b>PDB header:</b> transcription <b>Chain:</b> B: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> p53 tetramerization domain mutant t329f q331k
20	<a href="#">c2j10A_</a>	Alignment		98.3	87	<b>PDB header:</b> transcription <b>Chain:</b> A: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> p53 tetramerization domain mutant t329f q331k
21	<a href="#">c2j10D_</a>	Alignment	not modelled	98.3	87	<b>PDB header:</b> transcription <b>Chain:</b> D: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> p53 tetramerization domain mutant t329f q331k
22	<a href="#">c2j11D_</a>	Alignment	not modelled	98.3	81	<b>PDB header:</b> transcription <b>Chain:</b> D: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> p53 tetramerization domain mutant y327s t329g q331g
23	<a href="#">c2wqjM_</a>	Alignment	not modelled	98.3	41	<b>PDB header:</b> transcription <b>Chain:</b> M: <b>PDB Molecule:</b> tumor protein p73; <b>PDBTitle:</b> crystal structure of a truncated variant of the human p73 tetramerization domain
24	<a href="#">d1alua_</a>	Alignment	not modelled	98.2	79	<b>Fold:</b> p53 tetramerization domain <b>Superfamily:</b> p53 tetramerization domain <b>Family:</b> p53 tetramerization domain
25	<a href="#">c2l14B_</a>	Alignment		97.7	62	<b>PDB header:</b> protein binding <b>Chain:</b> B: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> structure of cbp nuclear coactivator binding domain in complex with2 p53 tad
26	<a href="#">c3zy0C_</a>	Alignment	not modelled	96.9	41	<b>PDB header:</b> transcription <b>Chain:</b> C: <b>PDB Molecule:</b> tumor protein p63; <b>PDBTitle:</b> crystal structure of a truncated variant of the human p63 tetramerization domain lacking the c-terminal helix
27	<a href="#">c2ly4B_</a>	Alignment	not modelled	96.9	61	<b>PDB header:</b> nuclear protein/antitumour protein <b>Chain:</b> B: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> hmgb1-facilitated p53 dna binding occurs via hmg-box/p53 transactivation domain interaction and is regulated by the acidic3 tail

28	<a href="#">c1q2iA_</a>		Alignment	not modelled	92.1	87	<b>PDB header:</b> antitumor protein <b>Chain:</b> A: <b>PDB Molecule:</b> pnc27; <b>PDBTitle:</b> nmr solution structure of a peptide from the mdm-2 binding2 domain of the p53 protein that is selectively cytotoxic to cancer cells
29	<a href="#">c1dt7Y_</a>		Alignment		91.5	70	<b>PDB header:</b> signaling protein <b>Chain:</b> Y: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> solution structure of the c-terminal negative regulatory2 domain of p53 in a complex with ca2+-bound s100b(bb)
30	<a href="#">c1dt7X_</a>		Alignment		91.5	70	<b>PDB header:</b> signaling protein <b>Chain:</b> X: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> solution structure of the c-terminal negative regulatory2 domain of p53 in a complex with ca2+-bound s100b(bb)
31	<a href="#">c3dacB_</a>		Alignment	not modelled	67.7	77	<b>PDB header:</b> cell cycle <b>Chain:</b> B: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> structure of the human mdmx protein bound to the p53 tumor2 suppressor transactivation domain
32	<a href="#">c1jspA_</a>		Alignment	not modelled	63.9	68	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> tumor protein p53; <b>PDBTitle:</b> nmr structure of cbp bromodomain in complex with p53 peptide
33	<a href="#">c2xdvA_</a>		Alignment	not modelled	63.1	32	<b>PDB header:</b> nuclear protein <b>Chain:</b> A: <b>PDB Molecule:</b> myc-induced nuclear antigen; <b>PDBTitle:</b> crystal structure of the catalytic domain of fli14393
34	<a href="#">c3dacP_</a>		Alignment	not modelled	57.6	83	<b>PDB header:</b> cell cycle <b>Chain:</b> P: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> structure of the human mdmx protein bound to the p53 tumor2 suppressor transactivation domain
35	<a href="#">c4diqA_</a>		Alignment	not modelled	46.5	40	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> lysine-specific demethylase no66; <b>PDBTitle:</b> crystal structure of human no66
36	<a href="#">c3gycB_</a>		Alignment	not modelled	25.3	43	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> putative glycoside hydrolase; <b>PDBTitle:</b> crystal structure of putative glycoside hydrolase (yp_001304622.1) from parabacteroides distasonis atcc 8503 at 1.85 a resolution
37	<a href="#">d1vrba1</a>		Alignment	not modelled	25.1	20	<b>Fold:</b> Double-stranded beta-helix <b>Superfamily:</b> Clavaminate synthase-like <b>Family:</b> Asparaginyl hydroxylase-like
38	<a href="#">c4joiA_</a>		Alignment	not modelled	21.0	21	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> cst complex subunit stn1; <b>PDBTitle:</b> crystal structure of the human telomeric stn1-ten1 complex
39	<a href="#">d1iknc_</a>		Alignment	not modelled	19.7	18	<b>Fold:</b> immunoglobulin-like beta-sandwich <b>Superfamily:</b> E set domains <b>Family:</b> NF-kappa-B/REL/DORSAL transcription factors, C-terminal domain
40	<a href="#">c3cgub_</a>		Alignment	not modelled	19.2	44	<b>PDB header:</b> hormone/signaling protein <b>Chain:</b> B: <b>PDB Molecule:</b> protein giant-lens; <b>PDBTitle:</b> crystal structure of unliganded argos
41	<a href="#">c2b3gb_</a>		Alignment	not modelled	15.6	50	<b>PDB header:</b> replication <b>Chain:</b> B: <b>PDB Molecule:</b> cellular tumor antigen p53; <b>PDBTitle:</b> p53n (fragment 33-60) bound to rpa70n
42	<a href="#">d1ef1c_</a>		Alignment	not modelled	14.8	21	<b>Fold:</b> Non-globular all-alpha subunits of globular proteins <b>Superfamily:</b> Moesin tail domain <b>Family:</b> Moesin tail domain
43	<a href="#">c4gopB_</a>		Alignment	not modelled	14.7	21	<b>PDB header:</b> dna binding protein/dna <b>Chain:</b> B: <b>PDB Molecule:</b> putative uncharacterized protein; <b>PDBTitle:</b> structure and conformational change of a replication protein a2 heterotrimer bound to ssdna
44	<a href="#">c2pi2A_</a>		Alignment	not modelled	11.7	11	<b>PDB header:</b> replication, dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> replication protein a 32 kda subunit; <b>PDBTitle:</b> full-length replication protein a subunits rpa14 and rpa32
45	<a href="#">d1e7ua3</a>		Alignment	not modelled	11.1	25	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> Ras-binding domain, RBD
46	<a href="#">d1e8ya3</a>		Alignment	not modelled	11.1	36	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Ubiquitin-like <b>Family:</b> Ras-binding domain, RBD
47	<a href="#">d1w5sa1</a>		Alignment	not modelled	10.6	25	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Helicase DNA-binding domain
48	<a href="#">d2pi2a1</a>		Alignment	not modelled	10.2	11	<b>Fold:</b> OB-fold <b>Superfamily:</b> Nucleic acid-binding proteins <b>Family:</b> Single strand DNA-binding domain, SSB
49	<a href="#">c3kf6A_</a>		Alignment	not modelled	10.2	13	<b>PDB header:</b> structural protein <b>Chain:</b> A: <b>PDB Molecule:</b> protein stn1; <b>PDBTitle:</b> crystal structure of s. pombe stn1-ten1 complex
50	<a href="#">c3czdA_</a>		Alignment	not modelled	8.6	42	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> glutaminase kidney isoform; <b>PDBTitle:</b> crystal structure of human glutaminase in complex with l-glutamate
51	<a href="#">c3ss4C_</a>		Alignment	not modelled	8.5	42	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> glutaminase c; <b>PDBTitle:</b> crystal structure of mouse glutaminase c, phosphate-bound form
							<b>PDB header:</b> hydrolase

52	<a href="#">c3ih9A</a>	Alignment	not modelled	8.4	29	<b>Chain:</b> A: <b>PDB Molecule:</b> salt-tolerant glutaminase; <b>PDBTitle:</b> crystal structure analysis of mglu in its tris form
53	<a href="#">c2dfwA</a>	Alignment	not modelled	8.2	29	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> salt-tolerant glutaminase; <b>PDBTitle:</b> crystal structure of a major fragment of the salt-tolerant2 glutaminase from micrococcus luteus k-3
54	<a href="#">c3IsoA</a>	Alignment	not modelled	8.1	45	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> putative membrane anchored protein; <b>PDBTitle:</b> crystal structure of putative membrane anchored protein from2 corynebacterium diphtheriae
55	<a href="#">c1pxeA</a>	Alignment	not modelled	8.0	26	<b>PDB header:</b> metal binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> neural zinc finger transcription factor 1; <b>PDBTitle:</b> solution structure of a cchc domain of neural zinc finger2 factor-1
56	<a href="#">d1regx</a>	Alignment	not modelled	8.0	23	<b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> Translational regulator protein regA <b>Family:</b> Translational regulator protein regA
57	<a href="#">c2pbyB</a>	Alignment	not modelled	7.9	26	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> glutaminase; <b>PDBTitle:</b> probable glutaminase from geobacillus kaustophilus hta426
58	<a href="#">c1zldA</a>	Alignment	not modelled	7.9	54	<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> ptr necrosis toxin; <b>PDBTitle:</b> crystal structure of a rgd-containing host-selective toxin:2 pyrenophora tritici-repentis ptr toxA
59	<a href="#">d1o5wa2</a>	Alignment	not modelled	7.9	33	<b>Fold:</b> FAD-linked reductases, C-terminal domain <b>Superfamily:</b> FAD-linked reductases, C-terminal domain <b>Family:</b> L-aminoacid/polyamine oxidase
60	<a href="#">d2je8a3</a>	Alignment	not modelled	7.9	16	<b>Fold:</b> Immunoglobulin-like beta-sandwich <b>Superfamily:</b> beta-Galactosidase/glucuronidase domain <b>Family:</b> beta-Galactosidase/glucuronidase domain
61	<a href="#">c3uo9B</a>	Alignment	not modelled	7.6	42	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> B: <b>PDB Molecule:</b> glutaminase kidney isoform, mitochondrial; <b>PDBTitle:</b> crystal structure of human gac in complex with glutamate and bptes
62	<a href="#">d1ko7a2</a>	Alignment	not modelled	7.4	19	<b>Fold:</b> PEP carboxykinase-like <b>Superfamily:</b> PEP carboxykinase-like <b>Family:</b> HPr kinase HprK C-terminal domain
63	<a href="#">d1ydua1</a>	Alignment	not modelled	7.2	19	<b>Fold:</b> At5g01610-like <b>Superfamily:</b> At5g01610-like <b>Family:</b> At5g01610-like
64	<a href="#">c1t0pB</a>	Alignment	not modelled	6.9	19	<b>PDB header:</b> immune system <b>Chain:</b> B: <b>PDB Molecule:</b> intercellular adhesion molecule-3; <b>PDBTitle:</b> structural basis of icam recognition by integrin alpah1beta2 revealed2 in the complex structure of binding domains of icam-3 and alphabeta2 at 1.65 a
65	<a href="#">d1u60a</a>	Alignment	not modelled	6.8	29	<b>Fold:</b> beta-lactamase/transpeptidase-like <b>Superfamily:</b> beta-lactamase/transpeptidase-like <b>Family:</b> Glutaminase
66	<a href="#">c2q37A</a>	Alignment	not modelled	6.6	30	<b>PDB header:</b> plant protein, lyase <b>Chain:</b> A: <b>PDB Molecule:</b> ohcu decarboxylase; <b>PDBTitle:</b> crystal structure of ohcu decarboxylase in the presence of2 (s)-allantoin
67	<a href="#">d2q37a1</a>	Alignment	not modelled	6.6	30	<b>Fold:</b> UraD-like <b>Superfamily:</b> UraD-Like <b>Family:</b> UraD-like
68	<a href="#">c1svcP</a>	Alignment	not modelled	6.4	15	<b>PDB header:</b> transcription/dna <b>Chain:</b> P: <b>PDB Molecule:</b> protein (nuclear factor kappa-b (nf-kb)); <b>PDBTitle:</b> nfkb p50 homodimer bound to dna
69	<a href="#">d1e6vc</a>	Alignment	not modelled	6.2	58	<b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> Methyl-coenzyme M reductase subunits <b>Family:</b> Methyl-coenzyme M reductase gamma chain
70	<a href="#">c1ixtA</a>	Alignment	not modelled	6.0	80	<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> spasmodic protein tx9a-like protein; <b>PDBTitle:</b> structure of a novel p-superfamily spasmodic conotoxin2 reveals an inhibitory cystine knot motif
71	<a href="#">d1ixta</a>	Alignment	not modelled	6.0	80	<b>Fold:</b> Knottins (small inhibitors, toxins, lectins) <b>Superfamily:</b> omega toxin-like <b>Family:</b> Conotoxin
72	<a href="#">d2o8ia1</a>	Alignment	not modelled	6.0	13	<b>Fold:</b> UraD-like <b>Superfamily:</b> UraD-Like <b>Family:</b> UraD-like
73	<a href="#">d1fx0b1</a>	Alignment	not modelled	5.7	28	<b>Fold:</b> Left-handed superhelix <b>Superfamily:</b> C-terminal domain of alpha and beta subunits of F1 ATP synthase <b>Family:</b> C-terminal domain of alpha and beta subunits of F1 ATP synthase
74	<a href="#">d3c7ba1</a>	Alignment	not modelled	5.5	23	<b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> 4Fe-4S ferredoxins <b>Family:</b> Ferrodoxin domains from multidomain proteins
75	<a href="#">d2bosa</a>	Alignment	not modelled	5.4	38	<b>Fold:</b> OB-fold <b>Superfamily:</b> Bacterial enterotoxins <b>Family:</b> Bacterial AB5 toxins, B-subunits
76	<a href="#">c2wxoA</a>	Alignment	not modelled	5.1	27	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic <b>PDBTitle:</b> the crystal structure of the murine class ia pi 3-kinase2 p110delta in complex with as5.
77	<a href="#">c3kbyB</a>	Alignment	not modelled	5.1	22	<b>PDB header:</b> unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> putative uncharacterized protein; <b>PDBTitle:</b> crystal structure of hypothetical protein from staphylococcus aureus