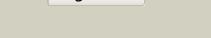
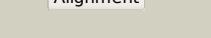
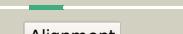
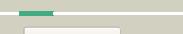
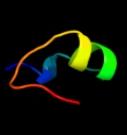
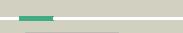
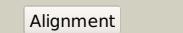
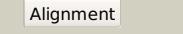
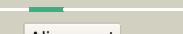
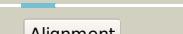


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	A0PK84
Date	Wed Jul 10 14:28:08 BST 2013
Unique Job ID	8b671c3d7f6075cd

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ky9B_	 Alignment		84.8	7	PDB header: apoptosis Chain: B; PDB Molecule: proto-oncogene vav; PDBTitle: autoinhibited vav1
2	c2vrwB_	 Alignment		81.3	7	PDB header: signaling protein Chain: B; PDB Molecule: proto-oncogene vav; PDBTitle: critical structural role for the ph and c1 domains of the2 vav1 exchange factor
3	c3bjjA_	 Alignment		72.9	7	PDB header: signaling protein Chain: A; PDB Molecule: proto-oncogene vav; PDBTitle: structural basis of promiscuous guanine nucleotide exchange2 by the t-cell essential vav1
4	c1jocA_	 Alignment		68.4	13	PDB header: membrane protein Chain: A; PDB Molecule: early endosomal autoantigen 1; PDBTitle: eea1 homodimer of c-terminal fyve domain bound to inositol2 1,3-diphosphate
5	c3zyqA_	 Alignment		61.3	15	PDB header: signaling Chain: A; PDB Molecule: hepatocyte growth factor-regulated tyrosine kinase PDBTitle: crystal structure of the tandem vhs and fyve domains of hepatocyte2 growth factor-regulated tyrosine kinase substrate (hgs-hrs) at 1.483 a resolution
6	c3okyA_	 Alignment		58.8	23	PDB header: signaling protein Chain: A; PDB Molecule: plexin-a2; PDBTitle: plexin a2 in complex with semaphorin 6a
7	c1dvpA_	 Alignment		58.1	18	PDB header: transferase Chain: A; PDB Molecule: hepatocyte growth factor-regulated tyrosine PDBTitle: crystal structure of the vhs and fyve tandem domains of hrs,2 a protein involved in membrane trafficking and signal3 transduction
8	c1x4uA_	 Alignment		53.6	10	PDB header: lipid binding protein Chain: A; PDB Molecule: zinc finger, fyve domain containing 27 isoform b; PDBTitle: solution structure of the fyve domain from human fyve2 domain containing 27 isoform b protein
9	d2pg3a1	 Alignment		53.5	21	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases
10	c2yqmA_	 Alignment		53.5	17	PDB header: protein transport Chain: A; PDB Molecule: run and fyve domain-containing protein 1; PDBTitle: solution structure of the fyve domain in zinc finger fyve2 domain-containing protein 12
11	c2k2cA_	 Alignment		50.8	16	PDB header: metal binding protein Chain: A; PDB Molecule: ring finger and chy zinc finger domain- PDBTitle: solution nmr structure of n-terminal domain of human pirh2.2 northeast structural genomics consortium (nsgc) target ht2a

12	c3al9B_			50.4	23	PDB header: signaling protein Chain: B; PDB Molecule: plexin-a2; PDBTitle: mouse plexin a2 extracellular domain
13	c3al8B_			49.0	23	PDB header: signaling protein Chain: B; PDB Molecule: plexin-a2; PDBTitle: plexin a2 / semaphorin 6a complex
14	c2a20A_			47.6	13	PDB header: metal binding protein Chain: A; PDB Molecule: regulating synaptic membrane exocytosis protein PDBTitle: solution structure of rim2 zinc finger domain
15	d2dkta2			45.0	17	Fold: Zinc hairpin stack Superfamily: Zinc hairpin stack Family: Zinc hairpin stack
16	c1z2qA_			44.7	17	PDB header: membrane protein Chain: A; PDB Molecule: lm5-1; PDBTitle: high-resolution solution structure of the lm5-1 fyve domain2 from leishmania major
17	d1olza3			44.5	25	Fold: Trefoil/Plexin domain-like Superfamily: Plexin repeat Family: Plexin repeat
18	c3ol2B_			43.1	18	PDB header: signaling protein Chain: B; PDB Molecule: plexin-b1; PDBTitle: receptor-ligand structure of human semaphorin 4d with plexin b1.
19	d1joca1			43.0	13	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: FYVE, a phosphatidylinositol-3-phosphate binding domain
20	c3nvnB_			42.9	19	PDB header: viral protein/signaling protein Chain: B; PDB Molecule: plexin-c1; PDBTitle: molecular mechanism of guidance cue recognition
21	c3nvqE_		not modelled	42.8	15	PDB header: signaling protein/protein binding Chain: E; PDB Molecule: semaphorin-7a; PDBTitle: molecular mechanism of guidance cue recognition
22	d1wfka_		not modelled	42.8	10	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: FYVE, a phosphatidylinositol-3-phosphate binding domain
23	c4gz8A_		not modelled	42.1	22	PDB header: signaling protein Chain: A; PDB Molecule: semaphorin-3a; PDBTitle: mouse semaphorin 3a, domains sema-psi-ig
24	c2uzxB_		not modelled	41.6	12	PDB header: signaling protein/receptor Chain: B; PDB Molecule: hepatocyte growth factor receptor; PDBTitle: structure of the human receptor tyrosine kinase met in2 complex with the listeria monocytogenes invasion protein3 inlB: crystal form i
25	c2cszA_		not modelled	40.6	15	PDB header: signaling protein Chain: A; PDB Molecule: synaptotagmin-like protein 4; PDBTitle: solution structure of the ring domain of the synaptotagmin-2 like protein 4
26	c1olzB_		not modelled	40.3	18	PDB header: developmental protein Chain: B; PDB Molecule: semaphorin 4d; PDBTitle: the ligand-binding face of the semaphorins revealed by the2 high resolution crystal structure of sema4d
27	c3okyB_		not modelled	40.3	19	PDB header: signaling protein Chain: B; PDB Molecule: putative uncharacterized protein; PDBTitle: plexin a2 in complex with semaphorin 6a
28	d2ayja1		not modelled	39.3	17	Fold: Rubredoxin-like Superfamily: Zn-binding ribosomal proteins Family: Ribosomal protein L40e
						PDB header: signaling protein/receptor

29	c2uzyB	Alignment	not modelled	38.7	12	Chain: B: PDB Molecule: hepatocyte growth factor receptor; PDBTitle: structure of the human receptor tyrosine kinase met in2 complex with the listeria monocytogenes invasion protein3 inlb: low resolution, crystal form ii
30	c3oktA	Alignment	not modelled	38.4	23	PDB header: signaling protein Chain: A: PDB Molecule: plexin-a2; PDBTitle: mouse plexin a2, extracellular domains 1-4
31	d2dmad2	Alignment	not modelled	38.3	43	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
32	c3t7IA	Alignment	not modelled	38.0	17	PDB header: transport protein Chain: A: PDB Molecule: zinc finger fyve domain-containing protein 16; PDBTitle: crystal structure of the fyve domain of endofin (zfyve16) at 1.1a2 resolution
33	c4fwwA	Alignment	not modelled	37.5	24	PDB header: transferase Chain: A: PDB Molecule: macrophage-stimulating protein receptor; PDBTitle: crystal structure of the sema-psi extracellular domains of human ron2 receptor tyrosine kinase
34	c3l0aA	Alignment	not modelled	37.0	20	PDB header: hydrolase Chain: A: PDB Molecule: putative exonuclease; PDBTitle: crystal structure of putative exonuclease (rer070207002219) from2 eubacterium rectale at 2.19 a resolution
35	d1nqja	Alignment	not modelled	36.8	42	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Plant C2H2 finger (QALGGH zinc finger)
36	d1dvpa2	Alignment	not modelled	35.9	22	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: FYVE, a phosphatidylinositol-3-phosphate binding domain
37	c1shyB	Alignment	not modelled	34.0	13	PDB header: growth factor/growth factor receptor Chain: B: PDB Molecule: hepatocyte growth factor receptor; PDBTitle: the crystal structure of hgf beta-chain in complex with the sema2 domain of the met receptor.
38	c2yw8A	Alignment	not modelled	32.8	17	PDB header: metal binding protein Chain: A: PDB Molecule: run and fyve domain-containing protein 1; PDBTitle: crystal structure of human run and fyve domain-containing2 protein
39	d2adra2	Alignment	not modelled	31.6	38	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
40	c1y02A	Alignment	not modelled	30.9	9	PDB header: metal binding protein Chain: A: PDB Molecule: fyve-ring finger protein sakura; PDBTitle: crystal structure of a fyve-type domain from caspase2 regulator carp2
41	d1paaa	Alignment	not modelled	30.2	38	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
42	c2gb5B	Alignment	not modelled	30.1	8	PDB header: hydrolase Chain: B: PDB Molecule: nadh pyrophosphatase; PDBTitle: crystal structure of nadh pyrophosphatase (ec 3.6.1.22) (1790429) from2 escherichia coli k12 at 2.30 a resolution
43	d1wfla	Alignment	not modelled	28.8	14	Fold: AN1-like Zinc finger Superfamily: AN1-like Zinc finger Family: AN1-like Zinc finger
44	d1vfya	Alignment	not modelled	28.1	19	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: FYVE, a phosphatidylinositol-3-phosphate binding domain
45	c3bl5E	Alignment	not modelled	26.0	17	PDB header: hydrolase Chain: E: PDB Molecule: queuosine biosynthesis protein quec; PDBTitle: crystal structure of quec from bacillus subtilis: an enzyme2 involved in preq1 biosynthesis
46	c3izbP	Alignment	not modelled	25.1	56	PDB header: ribosome Chain: P: PDB Molecule: 40s ribosomal protein rps11 (s17p); PDBTitle: localization of the small subunit ribosomal proteins into a 6.1 a2 cryo-em map of saccharomyces cerevisiae translating 80s ribosome
47	d1zbdb	Alignment	not modelled	24.9	10	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger Family: FYVE, a phosphatidylinositol-3-phosphate binding domain
48	d2fiya1	Alignment	not modelled	24.6	7	Fold: FdhE-like Superfamily: FdhE-like Family: FdhE-like
49	c3goxB	Alignment	not modelled	24.1	13	PDB header: hydrolase/dna Chain: B: PDB Molecule: restriction endonuclease hpy99i; PDBTitle: crystal structure of the beta-beta-alpha-me type ii restriction2 endonuclease hpy99i in the absence of edta
50	c2cr8A	Alignment	not modelled	23.1	22	PDB header: cell cycle Chain: A: PDB Molecule: mdm4 protein; PDBTitle: solution structure of the zf-ranbp domain of p53-binding2 protein mdm4
51	c3iz6P	Alignment	not modelled	22.6	56	PDB header: ribosome Chain: P: PDB Molecule: 40s ribosomal protein s11 (s17p); PDBTitle: localization of the small subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
52	c2ysmA	Alignment	not modelled	22.2	18	PDB header: transferase Chain: A: PDB Molecule: myeloid/lymphoid or mixed-lineage leukemia PDBTitle: solution structure of the first and second phd domain from2 myeloid/lymphoid or mixed-lineage leukemia protein 33 homolog
53	c2c6bA	Alignment	not modelled	21.5	17	PDB header: ligase Chain: A: PDB Molecule: ubiquitin-protein ligase e3 mdm2; PDBTitle: solution structure of the c4 zinc-finger domain of hdm2
54	d1wila	Alignment	not modelled	20.9	24	Fold: FYVE/PHD zinc finger Superfamily: FYVE/PHD zinc finger

						Family: variant PHD-like domain
55	c3swrA	Alignment	not modelled	20.4	17	PDB header: transferase Chain: A: PDB Molecule: dna (cytosine-5)-methyltransferase 1; PDBTitle: structure of human dnmt1 (601-1600) in complex with sinefungin
56	c3iz5p	Alignment	not modelled	20.4	20	PDB header: ribosome Chain: P: PDB Molecule: 60s ribosomal protein l15 (l15e); PDBTitle: localization of the large subunit ribosomal proteins into a 5.5 a2 cryo-em map of triticum aestivum translating 80s ribosome
57	d1shyb2	Alignment	not modelled	19.2	12	Fold: Trefoil/Plexin domain-like Superfamily: Plexin repeat Family: Plexin repeat
58	c3j21g	Alignment	not modelled	18.1	17	PDB header: ribosome Chain: G: PDB Molecule: 50s ribosomal protein l7ae; PDBTitle: promiscuous behavior of proteins in archaeal ribosomes revealed by 2 cryo-em: implications for evolution of eukaryotic ribosomes (50s ribosomal proteins)
59	d2it8a1	Alignment	not modelled	17.6	47	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Plant inhibitors of proteinases and amylases Family: Plant inhibitors of proteinases and amylases
60	c2it8A	Alignment	not modelled	17.6	47	PDB header: plant protein Chain: A: PDB Molecule: trypsin inhibitor 2; PDBTitle: solution structure of a linear analog of the cyclic squash2 trypsin inhibitor mcoti-ii
61	c2kfqA	Alignment	not modelled	17.5	31	PDB header: de novo protein Chain: A: PDB Molecule: fp1; PDBTitle: nmr structure of fp1
62	c3cezA	Alignment	not modelled	17.3	14	PDB header: oxidoreductase Chain: A: PDB Molecule: methionine-r-sulfoxide reductase; PDBTitle: crystal structure of methionine-r-sulfoxide reductase from2 burkholderia pseudomallei
63	d1lpva	Alignment	not modelled	17.2	29	Fold: Cysteine-rich DNA binding domain, (DM domain) Superfamily: Cysteine-rich DNA binding domain, (DM domain) Family: Cysteine-rich DNA binding domain, (DM domain)
64	c1lpvA	Alignment	not modelled	17.2	29	PDB header: transcription Chain: A: PDB Molecule: doublesex protein; PDBTitle: drosophila melanogaster doublesex (dsx), nmr, 18 structures
65	c2zetD	Alignment	not modelled	17.0	23	PDB header: signaling protein Chain: D: PDB Molecule: melanophillin; PDBTitle: crystal structure of the small gtpase rab27b complexed with2 the slp homology domain of slac2-a/melanophillin
66	d2epra1	Alignment	not modelled	16.8	15	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
67	c3j3aL	Alignment	not modelled	16.6	67	PDB header: ribosome Chain: L: PDB Molecule: 40s ribosomal protein s11; PDBTitle: structure of the human 40s ribosomal proteins
68	c3j20R	Alignment	not modelled	16.4	44	PDB header: ribosome Chain: R: PDB Molecule: 30s ribosomal protein s17p; PDBTitle: promiscuous behavior of proteins in archaeal ribosomes revealed by 2 cryo-em: implications for evolution of eukaryotic ribosomes (30s ribosomal subunit)
69	c4a1dK	Alignment	not modelled	16.4	26	PDB header: ribosome Chain: K: PDB Molecule: ubiquitin-60s ribosomal protein l40; PDBTitle: t.thermophila 60s ribosomal subunit in complex with initiation factor 6. this file contains 26s rrna and proteins of3 molecule 4.
70	c2xzn5	Alignment	not modelled	16.4	29	PDB header: ribosome Chain: 5: PDB Molecule: ribosomal protein s26e containing protein; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2
71	c1nj3A	Alignment	not modelled	16.0	22	PDB header: protein binding Chain: A: PDB Molecule: npl4; PDBTitle: structure and ubiquitin interactions of the conserved nzf2 domain of npl4
72	c3zeyV	Alignment	not modelled	16.0	29	PDB header: ribosome Chain: V: PDB Molecule: ribosomal protein s26, putative; PDBTitle: high-resolution cryo-electron microscopy structure of the trypanosoma2 brucei ribosome
73	c3j38a	Alignment	not modelled	15.8	21	PDB header: ribosome Chain: A: PDB Molecule: 40s ribosomal protein sa; PDBTitle: structure of the d. melanogaster 40s ribosomal proteins
74	d2yt9a1	Alignment	not modelled	15.7	38	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
75	c3u5ga	Alignment	not modelled	15.6	27	PDB header: ribosome Chain: A: PDB Molecule: 40s ribosomal protein s0-a; PDBTitle: the structure of the eukaryotic ribosome at 3.0 a resolution. this2 entry contains proteins of the 40s subunit, ribosome b
76	d1ha9a	Alignment	not modelled	15.2	47	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Plant inhibitors of proteinases and amylases Family: Plant inhibitors of proteinases and amylases
77	c3j39m	Alignment	not modelled	15.0	21	PDB header: ribosome Chain: M: PDB Molecule: 60s ribosomal protein l14; PDBTitle: structure of the d. melanogaster 60s ribosomal proteins
78	c2po8A	Alignment	not modelled	14.9	47	PDB header: plant protein Chain: A: PDB Molecule: mcoti-ii; PDBTitle: the structure of a two-disulfide intermediate of mcoti-ii
79	c3zeyE	Alignment	not modelled	14.7	56	PDB header: ribosome Chain: E: PDB Molecule: 40s ribosomal proteins s11, putative; PDBTitle: high-resolution cryo-electron microscopy structure of the trypanosoma2 brucei ribosome

80	d1fcda3		Alignment	not modelled	14.5	27	Fold: CO dehydrogenase flavoprotein C-domain-like Superfamily: FAD/NAD-linked reductases, dimerisation (C-terminal) domain Family: FAD/NAD-linked reductases, dimerisation (C-terminal) domain
81	c2eluA_		Alignment	not modelled	14.5	43	PDB header: transcription Chain: A: PDB Molecule: zinc finger protein 406; PDBTitle: solution structure of the 5th c2h2 zinc finger of human2 zinc finger protein 406
82	d1zu1a2		Alignment	not modelled	14.4	27	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: HkH motif-containing C2H2 finger
83	d1llmc2		Alignment	not modelled	13.6	28	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
84	c3hcjB_		Alignment	not modelled	13.0	15	PDB header: oxidoreductase Chain: B: PDB Molecule: peptide methionine sulfoxide reductase; PDBTitle: structure of msrb from xanthomonas campestris (oxidized2 form)
85	c3bvoA_		Alignment	not modelled	13.0	21	PDB header: chaperone Chain: A: PDB Molecule: co-chaperone protein hscb, mitochondrial precursor; PDBTitle: crystal structure of human co-chaperone protein hscb
86	c2xznQ_		Alignment	not modelled	12.9	56	PDB header: ribosome Chain: Q: PDB Molecule: ribosomal protein s17 containing protein; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2
87	c2k8dA_		Alignment	not modelled	12.7	11	PDB header: oxidoreductase Chain: A: PDB Molecule: peptide methionine sulfoxide reductase msrb; PDBTitle: solution structure of a zinc-binding methionine sulfoxide reductase
88	d2dlqa2		Alignment	not modelled	12.4	30	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
89	c3eh2B_		Alignment	not modelled	12.4	17	PDB header: protein transport Chain: B: PDB Molecule: protein transport protein sec24c; PDBTitle: crystal structure of the human copii-coat protein sec24c
90	c2k85A_		Alignment	not modelled	12.1	4	PDB header: protein binding Chain: A: PDB Molecule: glucocorticoid receptor dna-binding factor 1; PDBTitle: p190-a rhogap ff1 domain
91	d1wg2a_		Alignment	not modelled	12.1	8	Fold: AN1-like Zinc finger Superfamily: AN1-like Zinc finger Family: AN1-like Zinc finger
92	c3u5gL_		Alignment	not modelled	11.8	56	PDB header: ribosome Chain: L: PDB Molecule: 40s ribosomal protein s11-a; PDBTitle: the structure of the eukaryotic ribosome at 3.0 a resolution. this2 entry contains proteins of the 40s subunit, ribosome b
93	d1u85a1		Alignment	not modelled	11.8	28	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
94	c2ljsA_		Alignment	not modelled	11.6	47	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: trypsin inhibitor 3; PDBTitle: solution structure of mcot-v
95	c1d4uA_		Alignment	not modelled	11.4	9	PDB header: dna binding protein Chain: A: PDB Molecule: nucleotide excision repair protein xpa (xpa-mbd); PDBTitle: interactions of human nucleotide excision repair protein2 xpa with rpa70 and dna: chemical shift mapping and 15n nmr3 relaxation studies
96	d1xm0a1		Alignment	not modelled	11.3	11	Fold: Mss4-like Superfamily: Mss4-like Family: SeIR domain
97	d1l1da_		Alignment	not modelled	11.1	17	Fold: Mss4-like Superfamily: Mss4-like Family: SeIR domain
98	c2voyK_		Alignment	not modelled	10.8	15	PDB header: hydrolase Chain: K: PDB Molecule: sarcoplasmic/endoplasmic reticulum calcium PDBTitle: cryoem model of copa, the copper transporting atpase from2 archaeoglobus fulgidus
99	c3pt6B_		Alignment	not modelled	10.7	17	PDB header: transferase/dna Chain: B: PDB Molecule: dna (cytosine-5)-methyltransferase 1; PDBTitle: crystal structure of mouse dnmt1(650-1602) in complex with dna