

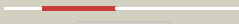



















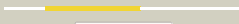

















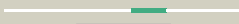
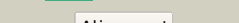



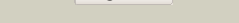
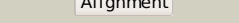
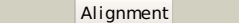


Phyre2

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Date	Thu Jan 5 12:00:12 GMT 2012
Unique Job ID	53efa99fd5dd98ad

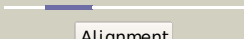
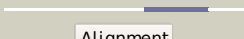
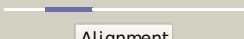
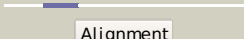

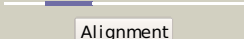


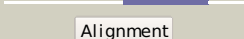

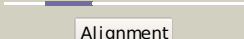




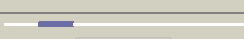





Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1wfxa_	 Alignment		100.0	33	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: Tpt1/KptA
2	d2cqka1	 Alignment		96.2	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: La domain
3	d1s29a_	 Alignment		96.2	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: La domain
4	d1zh5a1	 Alignment		95.2	18	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: La domain
5	c2paxA_	 Alignment		89.2	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
6	c1gs0B_	 Alignment		87.5	23	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
7	d1gs0a2	 Alignment		86.5	23	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: Poly(ADP-ribose) polymerase, C-terminal domain
8	c3c4hA_	 Alignment		84.6	35	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
9	c2x5yA_	 Alignment		81.4	15	PDB header: immune system Chain: A: PDB Molecule: zinc finger ccch-type antiviral protein 1; PDBTitle: human zc3hav1 (artd13), c-terminal domain
10	c3q6nF_	 Alignment		80.4	15	PDB header: chaperone Chain: F: PDB Molecule: heat shock protein hsp 90-alpha; PDBTitle: crystal structure of human mc-hsp90 in p21 space group
11	d1efya2	 Alignment		78.8	23	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: Poly(ADP-ribose) polymerase, C-terminal domain

12	c2vopA_		Alignment		78.7	15	PDB header: rna-binding protein Chain: A: PDB Molecule: lupus Ia protein; PDBTitle: crystal structure of n-terminal domains of human Ia protein2 complexed with rna oligomer auuuu
13	c3goyD_		Alignment		74.6	23	PDB header: transferase Chain: D: PDB Molecule: poly [adp-ribose] polymerase 14; PDBTitle: crystal structure of human poly(adp-ribose) polymerase 14, 2 catalytic fragment in complex with an inhibitor 3-3 aminobenzamide
14	d2rd6a2		Alignment		74.4	23	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: Poly(ADP-ribose) polymerase, C-terminal domain
15	c3bljA_		Alignment		73.0	32	PDB header: transferase Chain: A: PDB Molecule: poly(adp-ribose) polymerase 15; PDBTitle: crystal structure of human poly(adp-ribose) polymerase 15, catalytic2 fragment
16	c2pgfF_		Alignment		71.3	36	PDB header: transferase Chain: F: PDB Molecule: poly [adp-ribose] polymerase 12; PDBTitle: human poly(adp-ribose) polymerase 12, catalytic fragment in complex2 with an inhibitor 3-aminobenzoic acid
17	c3prvA_		Alignment		66.9	17	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein hsp 90-beta; PDBTitle: crystal structure of the middle domain of human hsp90-beta refined at2 2.3 a resolution
18	c3hkvA_		Alignment		63.4	32	PDB header: transferase Chain: A: PDB Molecule: poly [adp-ribose] polymerase 10; PDBTitle: human poly(adp-ribose) polymerase 10, catalytic fragment in2 complex with an inhibitor 3-aminobenzamide
19	d2o0qa1		Alignment		62.9	27	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: CC0527-like
20	c1y6zA_		Alignment		53.1	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: heat shock protein, putative; PDBTitle: middle domain of plasmodium falciparum putative heat shock protein2 pf14_0417
21	c3mhkA_		Alignment	not modelled	48.0	26	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
22	c2d58A_		Alignment	not modelled	47.1	21	PDB header: metal binding protein Chain: A: PDB Molecule: allograft inflammatory factor 1; PDBTitle: human microglia-specific protein iba1
23	d1n0yb_		Alignment	not modelled	44.5	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
24	c2amiA_		Alignment	not modelled	42.9	18	PDB header: cell cycle Chain: A: PDB Molecule: caltractin; PDBTitle: solution structure of the calcium-loaded n-terminal sensor2 domain of centrin
25	c2vtgA_		Alignment	not modelled	40.4	18	PDB header: metal-binding protein Chain: A: PDB Molecule: ionized calcium-binding adapter molecule 2; PDBTitle: crystal structure of human iba2, trigonal crystal form
26	d1wrka1		Alignment	not modelled	40.3	16	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
27	c2gq0B_		Alignment	not modelled	38.8	19	PDB header: chaperone, hydrolase Chain: B: PDB Molecule: chaperone protein htpg; PDBTitle: crystal structure of the middle domain of htpg, the e. coli2 hsp90
28	d1sw8a_		Alignment	not modelled	38.6	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
							PDB header: structural genomics, unknown function

29	c2kzvA	<div><div></div></div> Alignment	not modelled	38.0	20	Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of cv_0373(175-257) protein from2 chromobacterium violaceum, northeast structural genomics consortium3 target cvr118a
30	c2aucC	<div><div></div></div> Alignment	not modelled	37.2	14	PDB header: membrane protein Chain: C: PDB Molecule: myosin i a tail interacting protein; PDBTitle: structure of the plasmodium mtip-myoa complex, a key component of the2 parasite invasion motor
31	c3hjcA	<div><div></div></div> Alignment	not modelled	36.3	15	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein 83-1; PDBTitle: crystal structure of the carboxy-terminal domain of hsp90 from2 leishmania major, lmjf33.0312
32	c1hk7A	<div><div></div></div> Alignment	not modelled	35.7	23	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein hsp82; PDBTitle: middle domain of hsp90
33	c2o1uA	<div><div></div></div> Alignment	not modelled	35.2	28	PDB header: chaperone Chain: A: PDB Molecule: endoplasmin; PDBTitle: structure of full length grp94 with amp-pnp bound
34	d2fcea1	<div><div></div></div> Alignment	not modelled	35.2	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
35	d1tiza	<div><div></div></div> Alignment	not modelled	34.4	13	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
36	c2g2bA	<div><div></div></div> Alignment	not modelled	34.4	21	PDB header: immune system Chain: A: PDB Molecule: allograft inflammatory factor 1; PDBTitle: nmr structure of the human allograft inflammatory factor 1
37	c2cgeD	<div><div></div></div> Alignment	not modelled	34.2	20	PDB header: chaperone Chain: D: PDB Molecule: atp-dependent molecular chaperone hsp82; PDBTitle: crystal structure of an hsp90-sba1 closed chaperone complex
38	d1m39a	<div><div></div></div> Alignment	not modelled	32.8	24	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
39	c2cg9A	<div><div></div></div> Alignment	not modelled	32.8	19	PDB header: chaperone Chain: A: PDB Molecule: atp-dependent molecular chaperone hsp82; PDBTitle: crystal structure of an hsp90-sba1 closed chaperone complex
40	c2fcdA	<div><div></div></div> Alignment	not modelled	32.7	19	PDB header: cell cycle Chain: A: PDB Molecule: myosin light chain 1; PDBTitle: solution structure of n-lobe myosin light chain from2 saccharomices cerevisiae
41	d1s6ja	<div><div></div></div> Alignment	not modelled	29.7	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
42	d1avsa	<div><div></div></div> Alignment	not modelled	29.3	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
43	c2o1tB	<div><div></div></div> Alignment	not modelled	28.9	24	PDB header: chaperone Chain: B: PDB Molecule: endoplasmin; PDBTitle: structure of middle plus c-terminal domains (m+c) of grp94
44	d1usua	<div><div></div></div> Alignment	not modelled	28.8	19	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Hsp90 middle domain
45	d1fw4a	<div><div></div></div> Alignment	not modelled	28.5	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
46	c2o1wB	<div><div></div></div> Alignment	not modelled	27.8	28	PDB header: chaperone Chain: B: PDB Molecule: endoplasmin; PDBTitle: structure of n-terminal plus middle domains (n+m) of grp94
47	d1ap4a	<div><div></div></div> Alignment	not modelled	27.8	16	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
48	d1jc2a	<div><div></div></div> Alignment	not modelled	27.4	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
49	c1jc2A	<div><div></div></div> Alignment	not modelled	27.4	21	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
50	d2pq3a1	<div><div></div></div> Alignment	not modelled	26.6	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
51	c2I98A	<div><div></div></div> Alignment	not modelled	26.4	24	PDB header: contractile protein Chain: A: PDB Molecule: troponin c, slow skeletal and cardiac muscles; PDBTitle: structure of trans-resveratrol in complex with the cardiac regulatory2 protein troponin c
52	c2kdhA	<div><div></div></div> Alignment	not modelled	26.4	24	PDB header: structural protein Chain: A: PDB Molecule: troponin c, slow skeletal and cardiac muscles; PDBTitle: the solution structure of human cardiac troponin c in2 complex with the green tea polyphenol; (-)-3 epigallocatechin-3-gallate
53	c2k2aA	<div><div></div></div> Alignment	not modelled	26.1	16	PDB header: contractile protein Chain: A: PDB Molecule: troponin c; PDBTitle: solution structure of the apo c terminal domain of lethocerus troponin2 c isoform f1
		<div><div></div></div>				Fold: EF Hand-like

54	d1r2ua_	Alignment	not modelled	25.2	18	Superfamily: EF-hand Family: Calmodulin-like
55	d1oqpa_	Alignment	not modelled	25.2	29	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
56	c2jojA_	Alignment	not modelled	24.6	13	PDB header: cell cycle Chain: A: PDB Molecule: centrin protein; PDBTitle: nmr solution structure of n-terminal domain of euplotes2 octocarinatus centrin
57	c2kn2A_	Alignment	not modelled	24.0	18	PDB header: metal binding protein Chain: A: PDB Molecule: calmodulin; PDBTitle: solution structure of the c-terminal domain of soybean calmodulin2 isoform 4 fused with the calmodulin-binding domain of ntmkp1
58	d1ikpa2	Alignment	not modelled	23.2	32	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: ADP-ribosylating toxins
59	c1ih0A_	Alignment	not modelled	22.6	22	PDB header: contractile protein Chain: A: PDB Molecule: troponin c, slow skeletal and cardiac muscles; PDBTitle: structure of the c-domain of human cardiac troponin c in2 complex with ca2+ sensitizer emd 57033
60	d1ih0a_	Alignment	not modelled	22.6	22	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
61	c2k7bA_	Alignment	not modelled	21.7	18	PDB header: metal binding protein Chain: A: PDB Molecule: calcium-binding protein 1; PDBTitle: nmr structure of mg2+-bound cabp1 n-domain
62	c2a4iA_	Alignment	not modelled	20.8	24	PDB header: structural protein Chain: A: PDB Molecule: centrin 2; PDBTitle: solution structure of the c-terminal domain (t94-y172) of2 the human centrin 2 in complex with a 17 residues peptide3 (p1-xpc) from xeroderma pigmentosum group c protein
63	d1f54a_	Alignment	not modelled	20.4	16	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
64	c3li6A_	Alignment	not modelled	19.9	13	PDB header: metal binding protein Chain: A: PDB Molecule: calcium-binding protein; PDBTitle: crystal structure and trimer-monomer transition of n-terminal domain2 of ehcabp1 from entamoeba histolytica
65	c3li6G_	Alignment	not modelled	19.9	13	PDB header: metal binding protein Chain: G: PDB Molecule: calcium-binding protein; PDBTitle: crystal structure and trimer-monomer transition of n-terminal domain2 of ehcabp1 from entamoeba histolytica
66	c3li6J_	Alignment	not modelled	19.9	13	PDB header: metal binding protein Chain: J: PDB Molecule: calcium-binding protein; PDBTitle: crystal structure and trimer-monomer transition of n-terminal domain2 of ehcabp1 from entamoeba histolytica
67	d2cxaa1	Alignment	not modelled	18.8	13	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: LFTR-like
68	c2cxaA_	Alignment	not modelled	18.8	13	PDB header: transferase Chain: A: PDB Molecule: leucyl/phenylalanyl-trna-protein transferase; PDBTitle: crystal structure of leucyl/phenylalanyl-trna protein2 transferase from escherichia coli
69	c2rf5A_	Alignment	not modelled	18.7	19	PDB header: transferase Chain: A: PDB Molecule: tankyrase-1; PDBTitle: crystal structure of human tankyrase 1- catalytic parp domain
70	c1scvA_	Alignment	not modelled	18.4	21	PDB header: contractile protein, structural protein Chain: A: PDB Molecule: troponin c, slow skeletal and cardiac muscles; PDBTitle: nmr structure of the c terminal domain of cardiac troponin2 c bound to the n terminal domain of cardiac troponin i
71	d1fi5a_	Alignment	not modelled	18.4	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
72	c1sbjA_	Alignment	not modelled	18.4	21	PDB header: contractile protein, structural protein Chain: A: PDB Molecule: troponin c, slow skeletal and cardiac muscles; PDBTitle: nmr structure of the mg2+-loaded c terminal domain of2 cardiac troponin c bound to the n terminal domain of3 cardiac troponin i
73	c1fi5A_	Alignment	not modelled	18.4	21	PDB header: contractile protein Chain: A: PDB Molecule: protein (troponin c); PDBTitle: nmr structure of the c terminal domain of cardiac troponin2 c bound to the n terminal domain of cardiac troponin i.
74	c3rhgA_	Alignment	not modelled	18.0	11	PDB header: hydrolase Chain: A: PDB Molecule: putative phosphotriesterase; PDBTitle: crystal structure of amidohydrolase pmi1525 (target efi-500319) from2 proteus mirabilis hi4320
75	c2kz2A_	Alignment	not modelled	17.1	21	PDB header: metal binding protein Chain: A: PDB Molecule: calmodulin; PDBTitle: calmodulin, c-terminal domain, f92e mutant
76	d1np8a_	Alignment	not modelled	15.1	19	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
77	c1ozsA_	Alignment	not modelled	15.0	21	PDB header: structural protein Chain: A: PDB Molecule: troponin c, slow skeletal and cardiac muscles; PDBTitle: c-domain of human cardiac troponin c in complex with the2 inhibitory region of human cardiac troponin i
78	c2k9lA_	Alignment	not modelled	14.9	17	PDB header: transcription Chain: A: PDB Molecule: rna polymerase sigma factor rpon; PDBTitle: structure of the core binding domain of sigma54

79	c2ktgA	 Alignment	not modelled	14.7	18	PDB header: ca-binding protein Chain: A: PDB Molecule: calmodulin, putative; PDBTitle: calmodulin like protein from entamoeba histolytica: solution structure2 and calcium binding properties of a partially folded protein
80	c2iopD	 Alignment	not modelled	14.2	17	PDB header: chaperone Chain: D: PDB Molecule: chaperone protein htpg; PDBTitle: crystal structure of full-length htpg, the escherichia coli2 hsp90, bound to adp
81	d1n0ya	 Alignment	not modelled	14.1	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
82	d1ctda	 Alignment	not modelled	13.9	26	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
83	c2b1uA	 Alignment	not modelled	13.3	24	PDB header: metal binding protein Chain: A: PDB Molecule: calmodulin-like protein 5; PDBTitle: solution structure of calmodulin-like skin protein c2 terminal domain
84	d1zaca	 Alignment	not modelled	13.3	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
85	d1cmga	 Alignment	not modelled	12.7	22	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
86	c3sibA	 Alignment	not modelled	12.4	11	PDB header: dna binding protein Chain: A: PDB Molecule: ure3-bp sequence specific dna binding protein; PDBTitle: crystal structure of ure3-binding protein, wild-type
87	c1y4sA	 Alignment	not modelled	12.2	17	PDB header: chaperone Chain: A: PDB Molecule: chaperone protein htpg; PDBTitle: conformation rearrangement of heat shock protein 90 upon2 adp binding
88	c3li6D	 Alignment	not modelled	11.9	13	PDB header: metal binding protein Chain: D: PDB Molecule: calcium-binding protein; PDBTitle: crystal structure and trimer-monomer transition of n-terminal domain2 of ehcap1 from entamoeba histolytica
89	c2k7cA	 Alignment	not modelled	11.8	13	PDB header: metal binding protein Chain: A: PDB Molecule: calcium-binding protein 1; PDBTitle: nmr structure of mg2+-bound cabp1 c-domain
90	d2fsua1	 Alignment	not modelled	11.2	16	Fold: PLP-dependent transferase-like Superfamily: PhnH-like Family: PhnH-like
91	c2fsuA	 Alignment	not modelled	11.2	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein phnh; PDBTitle: crystal structure of the phnh protein from escherichia coli
92	c1npqA	 Alignment	not modelled	11.0	21	PDB header: structural protein Chain: A: PDB Molecule: troponin c; PDBTitle: structure of a rhodamine-labeled n-domain troponin c mutant2 (ca2+ saturated) in complex with skeletal troponin i 115-3 131
93	c3ctnA	 Alignment	not modelled	11.0	21	PDB header: calcium-binding protein Chain: A: PDB Molecule: troponin c; PDBTitle: structure of calcium-saturated cardiac troponin c, nmr, 302 structures
94	d1q46a1	 Alignment	not modelled	11.0	37	Fold: SAM domain-like Superfamily: elF2alpha middle domain-like Family: elF2alpha middle domain-like
95	c1novE	 Alignment	not modelled	10.4	33	PDB header: virus Chain: E: PDB Molecule: nodamura virus coat proteins; PDBTitle: nodamura virus
96	c3uatA	 Alignment	not modelled	10.3	13	PDB header: peptide binding protein Chain: A: PDB Molecule: disks large homolog 1; PDBTitle: guanylate kinase domains of the maguk family scaffold proteins as2 specific phospho-protein binding modules
97	d2qtva4	 Alignment	not modelled	9.8	33	Fold: Gelsolin-like Superfamily: C-terminal, gelsolin-like domain of Sec23/24 Family: C-terminal, gelsolin-like domain of Sec23/24
98	d1biaa1	 Alignment	not modelled	9.6	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Biotin repressor-like
99	c1ikqA	 Alignment	not modelled	9.5	32	PDB header: transferase Chain: A: PDB Molecule: exotoxin a; PDBTitle: pseudomonas aeruginosa exotoxin a, wild type