










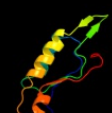












# Phyre2

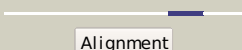
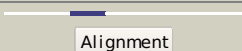

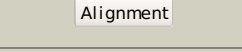
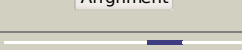


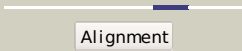
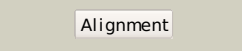
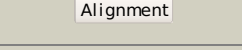
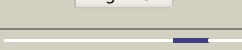


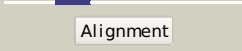
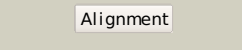
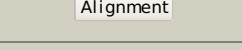
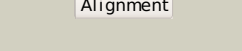


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Description	P37629
Date	Thu Jan 5 11:56:02 GMT 2012
Unique Job ID	4f6c529bf07547cd

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d3c5wc1</a>	 Alignment		73.4	21	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> Protein serine/threonine phosphatase
2	<a href="#">d1jk7a_</a>	 Alignment		59.2	21	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> Protein serine/threonine phosphatase
3	<a href="#">d2p6ba1</a>	 Alignment		52.1	28	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> Protein serine/threonine phosphatase
4	<a href="#">c2p6bC_</a>	 Alignment		51.7	28	<b>PDB header:</b> hydrolase/hydrolase regulator <b>Chain:</b> C: <b>PDB Molecule:</b> calmodulin-dependent calcineurin a subunit alpha <b>PDBTitle:</b> crystal structure of human calcineurin in complex with2 pvivit peptide
5	<a href="#">c1auia_</a>	 Alignment		49.5	35	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine phosphatase 2b; <b>PDBTitle:</b> human calcineurin heterodimer
6	<a href="#">d1auia_</a>	 Alignment		49.5	35	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> Protein serine/threonine phosphatase
7	<a href="#">d1s70a_</a>	 Alignment		45.0	24	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> Protein serine/threonine phosphatase
8	<a href="#">d1s95a_</a>	 Alignment		42.7	24	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> Protein serine/threonine phosphatase
9	<a href="#">c2zbmA_</a>	 Alignment		42.7	26	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> protein-tyrosine-phosphatase; <b>PDBTitle:</b> crystal structure of i115m mutant cold-active protein2 tyrosine phosphatase
10	<a href="#">c3icfB_</a>	 Alignment		39.1	22	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> serine/threonine-protein phosphatase t <b>PDBTitle:</b> structure of protein serine/threonine phosphatase from saccharomyces2 cerevisiae with similarity to human phosphatase pp5
11	<a href="#">c2qicA_</a>	 Alignment		33.3	21	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> diadenosine tetraphosphatase, putative; <b>PDBTitle:</b> crystal structure of a putative diadenosine tetraphosphatase

12	<a href="#">c2dfjA_</a>	Alignment		31.1	28	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> diadenosinetetraphosphatase; <b>PDBTitle:</b> crystal structure of the diadenosine tetraphosphate2 hydrolase from shigella flexneri 2a
13	<a href="#">d2nxfal</a>	Alignment		28.9	14	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> ADPRibase-Mn-like
14	<a href="#">c1oidA_</a>	Alignment		28.1	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> protein usha; <b>PDBTitle:</b> 5'-nucleotidase (e. coli) with an engineered disulfide2 bridge (s228c, p513c)
15	<a href="#">d1ii7a_</a>	Alignment		24.1	20	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> DNA double-strand break repair nuclease
16	<a href="#">c2jogA_</a>	Alignment		23.5	23	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> calmodulin-dependent calcineurin a subunit alpha <b>PDBTitle:</b> structure of the calcineurin-nfat complex
17	<a href="#">c2wdfA_</a>	Alignment		22.7	11	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> sulfur oxidation protein soxb; <b>PDBTitle:</b> termus thermophilus sulfate thiohydrolase soxb
18	<a href="#">c1p0oA_</a>	Alignment		22.6	32	<b>PDB header:</b> ribosome <b>Chain:</b> A: <b>PDB Molecule:</b> 19-mer peptide from 50s ribosomal protein l1; <b>PDBTitle:</b> hp (2-20) substitution of trp for gln and asp at position2 17 and 19 modification in sds-d25 micelles
19	<a href="#">c1wao4_</a>	Alignment		22.5	41	<b>PDB header:</b> hydrolase <b>Chain:</b> 4: <b>PDB Molecule:</b> serine/threonine protein phosphatase 5; <b>PDBTitle:</b> pp5 structure
20	<a href="#">d1uf3a_</a>	Alignment		20.4	8	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> TT1561-like
21	<a href="#">c2kkrA_</a>	Alignment	not modelled	19.4	29	<b>PDB header:</b> transcription, protein binding <b>Chain:</b> A: <b>PDB Molecule:</b> ataxin-7; <b>PDBTitle:</b> solution structure of sca7 zinc finger domain from human ataxin-72 protein
22	<a href="#">d1xm7a_</a>	Alignment	not modelled	15.0	22	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> Hypothetical protein aq 1666
23	<a href="#">d1qfxa_</a>	Alignment	not modelled	14.6	12	<b>Fold:</b> Phosphoglycerate mutase-like <b>Superfamily:</b> Phosphoglycerate mutase-like <b>Family:</b> Histidine acid phosphatase
24	<a href="#">d1pv8a_</a>	Alignment	not modelled	13.6	43	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Aldolase <b>Family:</b> 5-aminolaevulinatase dehydratase, ALAD (porphobilinogen synthase)
25	<a href="#">c2aklA_</a>	Alignment	not modelled	13.2	53	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> phna-like protein pa0128; <b>PDBTitle:</b> solution structure for phn-a like protein pa0128 from2 pseudomonas aeruginosa
26	<a href="#">c3alxB_</a>	Alignment	not modelled	13.2	24	<b>PDB header:</b> viral protein/membrane protein <b>Chain:</b> B: <b>PDB Molecule:</b> hemagglutinin, cdw150; <b>PDBTitle:</b> crystal structure of the measles virus hemagglutinin bound to its2 cellular receptor slam (mv-h(l482r)-slam(n102h/r108y) fusion)
27	<a href="#">d2akka1</a>	Alignment	not modelled	13.0	47	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Prokaryotic SH3-related domain <b>Family:</b> PhnA-like
28	<a href="#">d1qcsa2</a>	Alignment	not modelled	12.6	25	<b>Fold:</b> Cdc48 domain 2-like <b>Superfamily:</b> Cdc48 domain 2-like <b>Family:</b> Cdc48 domain 2-like

29	<a href="#">d2q4ma1</a>	Alignment	not modelled	12.5	22	<b>Fold:</b> Tubby C-terminal domain-like <b>Superfamily:</b> Tubby C-terminal domain-like <b>Family:</b> At5g01750-like
30	<a href="#">c1zxuA</a>	Alignment	not modelled	12.5	22	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> at5g01750 protein; <b>PDBTitle:</b> x-ray structure of protein from arabidopsis thaliana2 at5g01750
31	<a href="#">d2akla1</a>	Alignment	not modelled	12.5	53	<b>Fold:</b> SH3-like barrel <b>Superfamily:</b> Prokaryotic SH3-related domain <b>Family:</b> PhnA-like
32	<a href="#">c2jwlB</a>	Alignment	not modelled	11.7	27	<b>PDB header:</b> membrane protein <b>Chain:</b> B: <b>PDB Molecule:</b> protein tolR; <b>PDBTitle:</b> solution structure of periplasmic domain of tolR from h.2 influenzae with saxes data
33	<a href="#">d1s04a</a>	Alignment	not modelled	11.4	20	<b>Fold:</b> PUA domain-like <b>Superfamily:</b> PUA domain-like <b>Family:</b> ProFAR isomerase associated domain
34	<a href="#">c3av0A</a>	Alignment	not modelled	11.3	26	<b>PDB header:</b> recombination <b>Chain:</b> A: <b>PDB Molecule:</b> dna double-strand break repair protein mre11; <b>PDBTitle:</b> crystal structure of mre11-rad50 bound to atp s
35	<a href="#">c2k2bA</a>	Alignment	not modelled	11.3	64	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> degnerin mec-4; <b>PDBTitle:</b> sparse-constraint solution nmr structure of micelle-2 solubilized cytosolic amino terminal domain of c. elegans3 mechanosensory ion channel subunit mec-4. new york4 consortium on membrane protein structure (nycomps) (casp5 target)
36	<a href="#">d2z1aa2</a>	Alignment	not modelled	11.0	18	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> 5'-nucleotidase (syn. UDP-sugar hydrolase), N-terminal domain
37	<a href="#">c2eqxA</a>	Alignment	not modelled	10.6	33	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> kelch repeat and btb domain-containing protein 4; <b>PDBTitle:</b> solution structure of the back domain of kelch repeat and2 btb domain-containing protein 4
38	<a href="#">c3auzA</a>	Alignment	not modelled	10.3	26	<b>PDB header:</b> recombination <b>Chain:</b> A: <b>PDB Molecule:</b> dna double-strand break repair protein mre11; <b>PDBTitle:</b> crystal structure of mre11 with manganese
39	<a href="#">d1g5ba</a>	Alignment	not modelled	9.5	26	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> Protein serine/threonine phosphatase
40	<a href="#">d1myna</a>	Alignment	not modelled	9.1	58	<b>Fold:</b> Knottins (small inhibitors, toxins, lectins) <b>Superfamily:</b> Scorpion toxin-like <b>Family:</b> Insect defensins
41	<a href="#">c3letB</a>	Alignment	not modelled	8.6	53	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> adenosine monophosphate-protein transferase vops; <b>PDBTitle:</b> crystal structure of fic domain containing ampylator, vops
42	<a href="#">c1s3mA</a>	Alignment	not modelled	8.3	28	<b>PDB header:</b> phosphodiesterase <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein mj0936; <b>PDBTitle:</b> structural and functional characterization of a novel2 archaeal phosphodiesterase
43	<a href="#">d1s3la</a>	Alignment	not modelled	8.3	28	<b>Fold:</b> Metallo-dependent phosphatases <b>Superfamily:</b> Metallo-dependent phosphatases <b>Family:</b> YfcE-like
44	<a href="#">c2hb0B</a>	Alignment	not modelled	7.4	36	<b>PDB header:</b> cell adhesion <b>Chain:</b> B: <b>PDB Molecule:</b> cfa/i fimbrial subunit e; <b>PDBTitle:</b> crystal structure of cfae, the adhesive subunit of cfa/i2 fimbria of enterotoxigenic escherichia coli
45	<a href="#">c2vvxA</a>	Alignment	not modelled	6.7	16	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> protein a52; <b>PDBTitle:</b> structure of vaccinia virus protein a52
46	<a href="#">c3ps0C</a>	Alignment	not modelled	6.7	26	<b>PDB header:</b> rna binding protein <b>Chain:</b> C: <b>PDB Molecule:</b> crispr-associated protein, csa2; <b>PDBTitle:</b> the structure of the crispr-associated protein, csa2, from sulfolobus2 solfataricus
47	<a href="#">d1p42a2</a>	Alignment	not modelled	6.7	31	<b>Fold:</b> Ribosomal protein S5 domain 2-like <b>Superfamily:</b> Ribosomal protein S5 domain 2-like <b>Family:</b> UDP-3-O-[3-hydroxymyristoyl] N-acetylglucosamine deacetylase LpxC
48	<a href="#">c3qfkA</a>	Alignment	not modelled	6.6	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> 2.05 angstrom crystal structure of putative 5'-nucleotidase from2 staphylococcus aureus in complex with alpha-ketoglutarate
49	<a href="#">c3f83A</a>	Alignment	not modelled	6.5	36	<b>PDB header:</b> cell adhesion <b>Chain:</b> A: <b>PDB Molecule:</b> fusion of the minor pilin cfae and major pilin cfab; <b>PDBTitle:</b> structure of fusion complex of the minor pilin cfae and major pilin2 cfab of cfa/i pili from etec e. coli
50	<a href="#">c3lybC</a>	Alignment	not modelled	6.4	19	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> putative endoribonuclease; <b>PDBTitle:</b> structure of putative endoribonuclease(kp1_3112) from2 klebsiella pneumoniae
51	<a href="#">c3c9fB</a>	Alignment	not modelled	6.3	23	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> 5'-nucleotidase; <b>PDBTitle:</b> crystal structure of 5'-nucleotidase from candida albicans sc5314
52	<a href="#">c3zu0A</a>	Alignment	not modelled	6.2	24	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> nad nucleotidase; <b>PDBTitle:</b> structure of haemophilus influenzae nad nucleotidase (nadr)
53	<a href="#">c2vxdA</a>	Alignment	not modelled	6.2	46	<b>PDB header:</b> nuclear protein <b>Chain:</b> A: <b>PDB Molecule:</b> nucleophosmin; <b>PDBTitle:</b> the structure of the c-terminal domain of nucleophosmin

54	<a href="#">c2dbhA</a>	 Alignment	not modelled	6.2	38	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> tumor necrosis factor receptor superfamily <b>PDBTitle:</b> solution structure of the carboxyl-terminal card-like2 domain in human tnfr-related death receptor-6
55	<a href="#">c3fvyA</a>	 Alignment	not modelled	6.1	20	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> dipeptidyl-peptidase 3; <b>PDBTitle:</b> crystal structure of human dipeptidyl peptidase iii
56	<a href="#">d1uoya</a>	 Alignment	not modelled	6.1	64	<b>Fold:</b> Knottins (small inhibitors, toxins, lectins) <b>Superfamily:</b> Bubble protein <b>Family:</b> Bubble protein
57	<a href="#">d1cr5a2</a>	 Alignment	not modelled	6.0	30	<b>Fold:</b> Cdc48 domain 2-like <b>Superfamily:</b> Cdc48 domain 2-like <b>Family:</b> Cdc48 domain 2-like
58	<a href="#">d1xnea</a>	 Alignment	not modelled	5.9	11	<b>Fold:</b> PUA domain-like <b>Superfamily:</b> PUA domain-like <b>Family:</b> ProFAR isomerase associated domain
59	<a href="#">d2f9zc1</a>	 Alignment	not modelled	5.8	40	<b>Fold:</b> CNF1/YfiH-like putative cysteine hydrolases <b>Superfamily:</b> CNF1/YfiH-like putative cysteine hydrolases <b>Family:</b> CheD-like
60	<a href="#">c2xmoB</a>	 Alignment	not modelled	5.7	30	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> lmo2642 protein; <b>PDBTitle:</b> the crystal structure of lmo2642
61	<a href="#">c2jgwA</a>	 Alignment	not modelled	5.7	25	<b>PDB header:</b> immune response <b>Chain:</b> A: <b>PDB Molecule:</b> complement factor h; <b>PDBTitle:</b> structure of ccp module 7 of complement factor h - the amd2 at risk variant (402h)
62	<a href="#">c2ftcB</a>	 Alignment	not modelled	5.6	17	<b>PDB header:</b> ribosome <b>Chain:</b> B: <b>PDB Molecule:</b> mitochondrial ribosomal protein l2; <b>PDBTitle:</b> structural model for the large subunit of the mammalian mitochondrial2 ribosome
63	<a href="#">c1z8yO</a>	 Alignment	not modelled	5.6	50	<b>PDB header:</b> virus <b>Chain:</b> O: <b>PDB Molecule:</b> spike glycoprotein e1; <b>PDBTitle:</b> mapping the e2 glycoprotein of alphaviruses
64	<a href="#">c1z8yM</a>	 Alignment	not modelled	5.6	50	<b>PDB header:</b> virus <b>Chain:</b> M: <b>PDB Molecule:</b> spike glycoprotein e1; <b>PDBTitle:</b> mapping the e2 glycoprotein of alphaviruses
65	<a href="#">c1z8yK</a>	 Alignment	not modelled	5.6	50	<b>PDB header:</b> virus <b>Chain:</b> K: <b>PDB Molecule:</b> spike glycoprotein e1; <b>PDBTitle:</b> mapping the e2 glycoprotein of alphaviruses
66	<a href="#">c1z8yI</a>	 Alignment	not modelled	5.6	50	<b>PDB header:</b> virus <b>Chain:</b> I: <b>PDB Molecule:</b> spike glycoprotein e1; <b>PDBTitle:</b> mapping the e2 glycoprotein of alphaviruses
67	<a href="#">d1g40a2</a>	 Alignment	not modelled	5.4	38	<b>Fold:</b> Complement control module/SCR domain <b>Superfamily:</b> Complement control module/SCR domain <b>Family:</b> Complement control module/SCR domain
68	<a href="#">c2o42B</a>	 Alignment	not modelled	5.4	34	<b>PDB header:</b> apoptosis inhibitor <b>Chain:</b> B: <b>PDB Molecule:</b> m11l protein; <b>PDBTitle:</b> crystal structure of m11l, bcl-2 homolog from myxoma virus
69	<a href="#">d1hcca</a>	 Alignment	not modelled	5.3	25	<b>Fold:</b> Complement control module/SCR domain <b>Superfamily:</b> Complement control module/SCR domain <b>Family:</b> Complement control module/SCR domain
70	<a href="#">c1hccA</a>	 Alignment	not modelled	5.3	25	<b>PDB header:</b> glycoprotein <b>Chain:</b> A: <b>PDB Molecule:</b> 16th complement control protein; <b>PDBTitle:</b> three-dimensional structure of a complement control protein2 module in solution
71	<a href="#">d1twda</a>	 Alignment	not modelled	5.2	18	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> CutC-like <b>Family:</b> CutC-like
72	<a href="#">c4a1aM</a>	 Alignment	not modelled	5.2	15	<b>PDB header:</b> ribosome <b>Chain:</b> M: <b>PDB Molecule:</b> 60s ribosomal protein l5; <b>PDBTitle:</b> t.thermophila 60s ribosomal subunit in complex with2 initiation factor 6. this file contains 5s rrna,3 5.8s rrna and proteins of molecule 3.