




















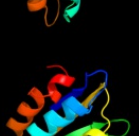
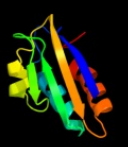










# Phyre2

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Description	P69811
Date	Thu Jan 5 12:12:04 GMT 2012
Unique Job ID	cf69585b14c53b77

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1a3aa_</a>	 Alignment		100.0	47	<b>Fold:</b> Phosphotransferase/anion transport protein <b>Superfamily:</b> Phosphotransferase/anion transport protein <b>Family:</b> IIA domain of mannitol-specific and ntr phosphotransferase EII
2	<a href="#">c3bjvA_</a>	 Alignment		100.0	27	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> rmpa; <b>PDBTitle:</b> the crystal structure of a putative pts iia(ptxa) from streptococcus2 mutans
3	<a href="#">c2oqtD_</a>	 Alignment		100.0	22	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> hypothetical protein spy0176; <b>PDBTitle:</b> structural genomics, the crystal structure of a putative2 pts iia domain from streptococcus pyogenes m1 gas
4	<a href="#">c3oxpB_</a>	 Alignment		100.0	25	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> phosphotransferase enzyme ii, a component; <b>PDBTitle:</b> structure of phosphotransferase enzyme ii, a component from yersinia2 pestis co92 at 1.2 a resolution
5	<a href="#">c3oxpA_</a>	 Alignment		100.0	25	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> phosphotransferase enzyme ii, a component; <b>PDBTitle:</b> structure of phosphotransferase enzyme ii, a component from yersinia2 pestis co92 at 1.2 a resolution
6	<a href="#">c2oq3A_</a>	 Alignment		100.0	25	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> mannitol-specific cryptic phosphotransferase <b>PDBTitle:</b> solution structure of the mannitol- specific cryptic2 phosphotransferase enzyme iia cmtb from escherichia coli
7	<a href="#">c3urrB_</a>	 Alignment		100.0	25	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> pts iia-like nitrogen-regulatory protein ptsn; <b>PDBTitle:</b> structure of pts iia-like nitrogen-regulatory protein ptsn (bth_i0484)2 (ptsn)
8	<a href="#">c2a0iA_</a>	 Alignment		100.0	29	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> pts system, nitrogen regulatory iia protein; <b>PDBTitle:</b> crystal structure of nitrogen regulatory protein iia-ntr from2 neisseria meningitidis
9	<a href="#">d1a6ja_</a>	 Alignment		100.0	23	<b>Fold:</b> Phosphotransferase/anion transport protein <b>Superfamily:</b> Phosphotransferase/anion transport protein <b>Family:</b> IIA domain of mannitol-specific and ntr phosphotransferase EII
10	<a href="#">d2hpriA_</a>	 Alignment		99.9	40	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
11	<a href="#">d1pcha_</a>	 Alignment		99.9	35	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like

12	<a href="#">d1ka5a_</a>	Alignment		99.9	41	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
13	<a href="#">d1qr5a_</a>	Alignment		99.9	41	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
14	<a href="#">d1xiza_</a>	Alignment		99.9	23	<b>Fold:</b> Phosphotransferase/anion transport protein <b>Superfamily:</b> Phosphotransferase/anion transport protein <b>Family:</b> IIA domain of mannitol-specific and ntr phosphotransferase EII
15	<a href="#">c3ihsB_</a>	Alignment		99.9	29	<b>PDB header:</b> transport protein <b>Chain:</b> B: <b>PDB Molecule:</b> phosphocarrier protein hpr; <b>PDBTitle:</b> crystal structure of a phosphocarrier protein hpr from2 bacillus anthracis str. ames
16	<a href="#">d1mola_</a>	Alignment		99.9	28	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
17	<a href="#">c3le1B_</a>	Alignment		99.9	36	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> phosphotransferase system, hpr-related proteins; <b>PDBTitle:</b> crystal structure of apohpr monomer from thermoanaerobacter2 tengcongensis
18	<a href="#">d2nzul1</a>	Alignment		99.9	40	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
19	<a href="#">d1cm3a_</a>	Alignment		99.9	33	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
20	<a href="#">d1ptfa_</a>	Alignment		99.9	40	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
21	<a href="#">d1zvvl1</a>	Alignment	not modelled	99.9	30	<b>Fold:</b> HPr-like <b>Superfamily:</b> HPr-like <b>Family:</b> HPr-like
22	<a href="#">c1hynQ_</a>	Alignment	not modelled	95.5	13	<b>PDB header:</b> membrane protein <b>Chain:</b> Q: <b>PDB Molecule:</b> band 3 anion transport protein; <b>PDBTitle:</b> crystal structure of the cytoplasmic domain of human2 erythrocyte band-3 protein
23	<a href="#">d1hynp_</a>	Alignment	not modelled	95.5	14	<b>Fold:</b> Phosphotransferase/anion transport protein <b>Superfamily:</b> Phosphotransferase/anion transport protein <b>Family:</b> Anion transport protein, cytoplasmic domain
24	<a href="#">c2jpiA_</a>	Alignment	not modelled	43.7	14	<b>PDB header:</b> structural genomics <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> chemical shift assignments of pa4090 from pseudomonas2 aeruginosa
25	<a href="#">c2dgbA_</a>	Alignment	not modelled	29.7	19	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein purs; <b>PDBTitle:</b> structure of thermus thermophilus purs in the p21 form
26	<a href="#">d2vo1a1</a>	Alignment	not modelled	28.9	14	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> Nitrogenase iron protein-like
27	<a href="#">c3bmbB_</a>	Alignment	not modelled	26.9	21	<b>PDB header:</b> rna binding protein <b>Chain:</b> B: <b>PDB Molecule:</b> regulator of nucleoside diphosphate kinase; <b>PDBTitle:</b> crystal structure of a new rna polymerase interacting2 protein
28	<a href="#">d1gtda_</a>	Alignment	not modelled	24.9	16	<b>Fold:</b> PurS-like <b>Superfamily:</b> PurS-like <b>Family:</b> PurS subunit of FGAM synthetase

29	<a href="#">d2ihta1</a>	Alignment	not modelled	24.2	31	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Pyruvate oxidase and decarboxylase, middle domain
30	<a href="#">c2p73A</a>	Alignment	not modelled	20.8	25	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> putative glycosyltransferase (mannosyltransferase) involved <b>PDBTitle:</b> crystal structure of a glycosyltransferase involved in the2 glycosylation of the major capsid of pbcv-1
31	<a href="#">d5csma</a>	Alignment	not modelled	19.7	16	<b>Fold:</b> Chorismate mutase II <b>Superfamily:</b> Chorismate mutase II <b>Family:</b> Allosteric chorismate mutase
32	<a href="#">d2mhra</a>	Alignment	not modelled	18.3	24	<b>Fold:</b> Four-helical up-and-down bundle <b>Superfamily:</b> Hemerythrin-like <b>Family:</b> Hemerythrin-like
33	<a href="#">c3citB</a>	Alignment	not modelled	17.6	38	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> sensor histidine kinase; <b>PDBTitle:</b> crystal structure of the gaf domain of a putative sensor histidine2 kinase from pseudomonas syringae pv. tomato
34	<a href="#">d1vq3a</a>	Alignment	not modelled	15.4	16	<b>Fold:</b> PurS-like <b>Superfamily:</b> PurS-like <b>Family:</b> PurS subunit of FGAM synthetase
35	<a href="#">d1zpdal</a>	Alignment	not modelled	13.5	12	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Pyruvate oxidase and decarboxylase, middle domain
36	<a href="#">d1rl1a3</a>	Alignment	not modelled	13.1	18	<b>Fold:</b> MutS N-terminal domain-like <b>Superfamily:</b> tRNA-intron endonuclease N-terminal domain-like <b>Family:</b> tRNA-intron endonuclease N-terminal domain-like
37	<a href="#">d1xi3a</a>	Alignment	not modelled	12.1	14	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Thiamin phosphate synthase <b>Family:</b> Thiamin phosphate synthase
38	<a href="#">d1umdb2</a>	Alignment	not modelled	11.8	22	<b>Fold:</b> TK C-terminal domain-like <b>Superfamily:</b> TK C-terminal domain-like <b>Family:</b> Branched-chain alpha-keto acid dehydrogenase beta-subunit, C-terminal-domain
39	<a href="#">c2zw2B</a>	Alignment	not modelled	11.0	15	<b>PDB header:</b> ligase <b>Chain:</b> B: <b>PDB Molecule:</b> putative uncharacterized protein sts178; <b>PDBTitle:</b> crystal structure of formylglycinamide ribonucleotide amidotransferase2 iii from sulfolobus tokodaii (stpus)
40	<a href="#">c2d5wA</a>	Alignment	not modelled	10.6	17	<b>PDB header:</b> peptide binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> peptide abc transporter, peptide-binding protein; <b>PDBTitle:</b> the crystal structure of oligopeptide binding protein from thermus2 thermophilus hb8 complexed with pentapeptide
41	<a href="#">d2ifea</a>	Alignment	not modelled	10.1	18	<b>Fold:</b> IF3-like <b>Superfamily:</b> Translation initiation factor IF3, C-terminal domain <b>Family:</b> Translation initiation factor IF3, C-terminal domain
42	<a href="#">d1pvda1</a>	Alignment	not modelled	8.6	12	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Pyruvate oxidase and decarboxylase, middle domain
43	<a href="#">c3m8uA</a>	Alignment	not modelled	8.4	16	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> heme-binding protein a; <b>PDBTitle:</b> crystal structure of glutathione-binding protein a (gbpa) from2 haemophilus parasuis sh0165 in complex with glutathione disulfide3 (gssg)
44	<a href="#">d1hrba</a>	Alignment	not modelled	8.4	20	<b>Fold:</b> Four-helical up-and-down bundle <b>Superfamily:</b> Hemerythrin-like <b>Family:</b> Hemerythrin-like
45	<a href="#">d1aopa2</a>	Alignment	not modelled	7.7	29	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Nitrite/Sulfite reductase N-terminal domain-like <b>Family:</b> Duplicated SiR/NiR-like domains 1 and 3
46	<a href="#">d1a04a2</a>	Alignment	not modelled	7.4	18	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> CheY-like <b>Family:</b> CheY-related
47	<a href="#">c3kt9A</a>	Alignment	not modelled	7.2	11	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> aprataxin; <b>PDBTitle:</b> aprataxin fha domain
48	<a href="#">d1i4ya</a>	Alignment	not modelled	7.2	20	<b>Fold:</b> Four-helical up-and-down bundle <b>Superfamily:</b> Hemerythrin-like <b>Family:</b> Hemerythrin-like
49	<a href="#">c1vj5C</a>	Alignment	not modelled	7.1	14	<b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> 5' polynucleotide kinase-3' phosphatase fha domain; <b>PDBTitle:</b> molecular architecture of mammalian polynucleotide kinase, a dna2 repair enzyme
50	<a href="#">d1dpea</a>	Alignment	not modelled	7.0	23	<b>Fold:</b> Periplasmic binding protein-like II <b>Superfamily:</b> Periplasmic binding protein-like II <b>Family:</b> Phosphate binding protein-like
51	<a href="#">c3hzhA</a>	Alignment	not modelled	7.0	19	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> chemotaxis response regulator (cheY-3); <b>PDBTitle:</b> crystal structure of the cheX-cheY-bef3-mg+2 complex from2 borrelia burgdorferi
52	<a href="#">d1zlqa1</a>	Alignment	not modelled	6.9	17	<b>Fold:</b> Periplasmic binding protein-like II <b>Superfamily:</b> Periplasmic binding protein-like II <b>Family:</b> Phosphate binding protein-like
53	<a href="#">d1yjma1</a>	Alignment	not modelled	6.8	14	<b>Fold:</b> SMAD/FHA domain <b>Superfamily:</b> SMAD/FHA domain <b>Family:</b> FHA domain
54	<a href="#">c1ibaA</a>	Alignment	not modelled	6.8	14	<b>PDB header:</b> phosphotransferase <b>Chain:</b> A: <b>PDB Molecule:</b> glucose permease; <b>PDBTitle:</b> glucose permease (domain iib), nmr, 11 structures

55	<a href="#">dlus7b_</a>	Alignment	not modelled	6.5	38	<b>Fold:</b> Hsp90 co-chaperone CDC37 <b>Superfamily:</b> Hsp90 co-chaperone CDC37 <b>Family:</b> Hsp90 co-chaperone CDC37
56	<a href="#">clus7B_</a>	Alignment	not modelled	6.5	38	<b>PDB header:</b> chaperone <b>Chain:</b> B: <b>PDB Molecule:</b> hsp90 co-chaperone cdc37; <b>PDBTitle:</b> complex of hsp90 and p50
57	<a href="#">dlfmfa_</a>	Alignment	not modelled	6.3	14	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> Cobalamin (vitamin B12)-binding domain <b>Family:</b> Cobalamin (vitamin B12)-binding domain
58	<a href="#">dlmzha_</a>	Alignment	not modelled	6.2	17	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Aldolase <b>Family:</b> Class I aldolase
59	<a href="#">dlccwa_</a>	Alignment	not modelled	6.2	14	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> Cobalamin (vitamin B12)-binding domain <b>Family:</b> Cobalamin (vitamin B12)-binding domain
60	<a href="#">dlgrja2</a>	Alignment	not modelled	6.1	23	<b>Fold:</b> FKBP-like <b>Superfamily:</b> FKBP-like <b>Family:</b> GreA transcript cleavage factor, C-terminal domain
61	<a href="#">c3nvaB_</a>	Alignment	not modelled	6.1	24	<b>PDB header:</b> ligase <b>Chain:</b> B: <b>PDB Molecule:</b> ctp synthase; <b>PDBTitle:</b> dimeric form of ctp synthase from sulfolobus solfataricus
62	<a href="#">dlm2ka_</a>	Alignment	not modelled	5.8	18	<b>Fold:</b> DHS-like NAD/FAD-binding domain <b>Superfamily:</b> DHS-like NAD/FAD-binding domain <b>Family:</b> Sir2 family of transcriptional regulators
63	<a href="#">d2hmza_</a>	Alignment	not modelled	5.8	18	<b>Fold:</b> Four-helical up-and-down bundle <b>Superfamily:</b> Hemerythrin-like <b>Family:</b> Hemerythrin-like
64	<a href="#">dltiga_</a>	Alignment	not modelled	5.7	18	<b>Fold:</b> IF3-like <b>Superfamily:</b> Translation initiation factor IF3, C-terminal domain <b>Family:</b> Translation initiation factor IF3, C-terminal domain