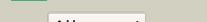


Phyre²

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Description	P39385
Date	Thu Jan 5 12:00:18 GMT 2012
Unique Job ID	627cfa026cd6e181

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1xg7a_			48.1	30	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: AgoG-like
2	d1ee8a1			44.6	21	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
3	d1k3xa1			42.5	13	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
4	d1tdza1			37.5	17	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
5	d1r2za1			37.5	19	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
6	c3edyA_			36.5	22	PDB header: hydrolase Chain: A: PDB Molecule: tripeptidyl-peptidase 1; PDB Title: crystal structure of the precursor form of human tripeptidyl-peptidase2 1
7	d1k82a1			35.3	10	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Middle domain of MutM-like DNA repair proteins
8	d1xqoa_			30.6	30	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: AgoG-like
9	c2kncA_			29.9	28	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDB Title: platelet integrin alfa1b-beta3 transmembrane-cytoplasmic2 heterocomplex
10	c3ee6A_			29.7	22	PDB header: hydrolase Chain: A: PDB Molecule: tripeptidyl-peptidase 1; PDB Title: crystal structure analysis of tripeptidyl peptidase -i
11	d1ug3a1			29.0	15	Fold: alpha-alpha superhelix Superfamily: ARM repeat Family: MIF4G domain-like

12	c21bgA	Alignment		27.8	46	PDB header: membrane protein Chain: A: PDB Molecule: major prion protein; PDBTitle: structure of the chr of the prion protein in dpc micelles
13	d1t1ea2	Alignment		25.9	12	Fold: Ferredoxin-like Superfamily: Protease propeptides/inhibitors Family: Subtilase propeptides/inhibitors
14	c2k1aA	Alignment		25.9	28	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDBTitle: bicelle-embedded integrin alpha(IIb) transmembrane segment
15	c3h2zaA	Alignment		25.4	18	PDB header: oxidoreductase Chain: A: PDB Molecule: mannitol-1-phosphate 5-dehydrogenase; PDBTitle: the crystal structure of mannitol-1-phosphate dehydrogenase from shigella flexneri
16	d1t5ja	Alignment		24.6	18	Fold: ADP-ribosylglycohydrolase Superfamily: ADP-ribosylglycohydrolase Family: ADP-ribosylglycohydrolase
17	c3g9dB	Alignment		24.3	23	PDB header: hydrolase Chain: B: PDB Molecule: dinitrogenase reductase activating PDBTitle: crystal structure glycohydrolase
18	d2aq0a1	Alignment		23.6	8	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
19	c2qtyB	Alignment		22.1	27	PDB header: hydrolase Chain: B: PDB Molecule: poly(adp-ribose) glycohydrolase arh3; PDBTitle: crystal structure of mouse adp-ribosylhydrolase 3 (marh3)
20	c2r6cG	Alignment		21.6	15	PDB header: replication Chain: G: PDB Molecule: dnag primase, helicase binding domain; PDBTitle: crystal form bh2
21	c2k7rA	Alignment	not modelled	20.3	16	PDB header: replication Chain: A: PDB Molecule: primosomal protein dnai; PDBTitle: n-terminal domain of the bacillus subtilis helicase-loading2 protein dnai
22	c2wocA	Alignment	not modelled	19.4	27	PDB header: hydrolase Chain: A: PDB Molecule: adp-ribosyl-[dinitrogen reductase] glycohydrolase; PDBTitle: crystal structure of the dinitrogenase reductase-activating2 glycohydrolase (drag) from rhodospirillum rubrum
23	c2yzwA	Alignment	not modelled	19.2	27	PDB header: hydrolase Chain: A: PDB Molecule: adp-ribosylglycohydrolase; PDBTitle: adp-ribosylglycohydrolase-related protein complex
24	c1b9uA	Alignment	not modelled	17.8	28	PDB header: hydrolase Chain: A: PDB Molecule: protein (atp synthase); PDBTitle: membrane domain of the subunit b of the e.coli atp synthase
25	d2gp4a2	Alignment	not modelled	16.9	13	Fold: IvD/EDD N-terminal domain-like Superfamily: IvD/EDD N-terminal domain-like Family: IvD/EDD N-terminal domain-like
26	d1rh5b	Alignment	not modelled	16.8	22	Fold: Single transmembrane helix Superfamily: Preprotein translocase SecE subunit Family: Preprotein translocase SecE subunit
27	c1ug3A	Alignment	not modelled	15.7	15	PDB header: translation Chain: A: PDB Molecule: eukaryotic protein synthesis initiation factor PDBTitle: c-terminal portion of human eif4gi
28	d2piha1	Alignment	not modelled	15.0	5	Fold: YheA-like Superfamily: YheA/YmcA-like Family: YmcA-like

29	c2pihA	Alignment	not modelled	15.0	5	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein ymca; PDBTitle: crystal structure of protein ymca from bacillus subtilis,2 northeast structural genomics target sr375
30	c2kncB	Alignment	not modelled	14.8	14	PDB header: cell adhesion Chain: B: PDB Molecule: integrin beta-3; PDBTitle: platelet integrin alfa1ib-beta3 transmembrane-cytoplasmic2 heterocomplex
31	c2f5gA	Alignment	not modelled	14.6	19	PDB header: hydrolase/dna Chain: A: PDB Molecule: formamidopyrimidine-dna glycosidase; PDBTitle: catalytically inactive (e3q) mutm crosslinked to oxog:c2 containing dna cc2
32	c3hd7A	Alignment	not modelled	13.9	6	PDB header: exocytosis Chain: A: PDB Molecule: vesicle-associated membrane protein 2; PDBTitle: helical extension of the neuronal snare complex into the membrane,2 spacegroup c 1 2 1
33	d1v54d	Alignment	not modelled	13.9	13	Fold: Single transmembrane helix Superfamily: Mitochondrial cytochrome c oxidase subunit IV Family: Mitochondrial cytochrome c oxidase subunit IV
34	c3qnqD	Alignment	not modelled	13.8	16	PDB header: membrane protein, transport protein Chain: D: PDB Molecule: pts system, cellobiose-specific iic component; PDBTitle: crystal structure of the transporter chbc, the iic component from the 2 n,n'-diacetylchitobiose-specific phosphotransferase system
35	c2y69Q	Alignment	not modelled	13.7	13	PDB header: electron transport Chain: Q: PDB Molecule: cytochrome c oxidase subunit 4 isoform 1; PDBTitle: bovine heart cytochrome c oxidase re-refined with molecular2 oxygen
36	d2a1ja1	Alignment	not modelled	13.6	8	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
37	d2crga1	Alignment	not modelled	13.2	29	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
38	c2kluA	Alignment	not modelled	12.8	26	PDB header: immune system, membrane protein Chain: A: PDB Molecule: t-cell surface glycoprotein cd4; PDBTitle: nmr structure of the transmembrane and cytoplasmic domains2 of human cd4
39	c2w2eA	Alignment	not modelled	12.7	10	PDB header: membrane protein Chain: A: PDB Molecule: aquaporin; PDBTitle: 1.15 angstrom crystal structure of p.pastoris aquaporin,2 aqy1, in a closed conformation at ph 3.5
40	d1xi8a3	Alignment	not modelled	12.5	20	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
41	c3hfwA	Alignment	not modelled	12.4	20	PDB header: hydrolase Chain: A: PDB Molecule: protein adp-ribosylarginine hydrolase; PDBTitle: crystal structure of human adp-ribosylhydrolase 1 (harh1)
42	c2opfA	Alignment	not modelled	12.2	15	PDB header: hydrolase/dna Chain: A: PDB Molecule: endonuclease viii; PDBTitle: crystal structure of the dna repair enzyme endonuclease-viii (nei)2 from e. coli (r252a) in complex with ap-site containing dna substrate
43	c2gp4A	Alignment	not modelled	12.0	15	PDB header: lyase Chain: A: PDB Molecule: 6-phosphogluconate dehydratase; PDBTitle: structure of [fes]cluster-free apo form of 6-phosphogluconate2 dehydratase from shewanella oneidensis
44	c3a46B	Alignment	not modelled	11.3	13	PDB header: hydrolase Chain: B: PDB Molecule: formamidopyrimidine-dna glycosylase; PDBTitle: crystal structure of mvne1/1fh complex
45	c2l23A	Alignment	not modelled	11.0	13	PDB header: transcription Chain: A: PDB Molecule: mediator of rna polymerase ii transcription subunit 25; PDBTitle: nmr structure of the acid (activator interacting domain) of the human2 mediator med25 protein
46	c1waza	Alignment	not modelled	11.0	18	PDB header: transport protein Chain: A: PDB Molecule: merf; PDBTitle: nmr structure determination of the bacterial mercury2 transporter, merf, in micelles
47	c3h3pT	Alignment	not modelled	10.8	43	PDB header: immune system Chain: T: PDB Molecule: 4e10_s0_1tjc_004_n; PDBTitle: crystal structure of hiv epitope-scaffold 4e10 fv complex
48	c1q90L	Alignment	not modelled	10.7	30	PDB header: photosynthesis Chain: L: PDB Molecule: cytochrome b6f complex subunit petl; PDBTitle: structure of the cytochrome b6f (plastoquinone : plastocyanin2 oxidoreductase) from chlamydomonas reinhardtii
49	d1q90I	Alignment	not modelled	10.7	30	Fold: Single transmembrane helix Superfamily: PetL subunit of the cytochrome b6f complex Family: PetL subunit of the cytochrome b6f complex
50	c3kvhA	Alignment	not modelled	10.7	17	PDB header: rna binding protein Chain: A: PDB Molecule: protein syndesmos; PDBTitle: crystal structure of human protein syndesmos (nudt16-like protein)
51	c1ee8A	Alignment	not modelled	10.7	21	PDB header: dna binding protein Chain: A: PDB Molecule: mutm (fpg) protein; PDBTitle: crystal structure of mutm (fpg) protein from thermus thermophilus hb8
52	c1nnjA	Alignment	not modelled	10.2	15	PDB header: hydrolase Chain: A: PDB Molecule: formamidopyrimidine-dna glycosylase; PDBTitle: crystal structure complex between the lactococcus lactis fpg and an2 abasic site containing dna
53	d1ymga1	Alignment	not modelled	10.1	28	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like

54	c1ymgA		Alignment	not modelled	10.1	28	PDB header: membrane protein Chain: A: PDB Molecule: lens fiber major intrinsic protein; PDBTitle: the channel architecture of aquaporin o at 2.2 angstrom resolution
55	c2hjmB		Alignment	not modelled	9.8	21	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein pf1176; PDBTitle: crystal structure of a singleton protein pf1176 from p. furiosus
56	d1k6za		Alignment	not modelled	9.7	26	Fold: Secretion chaperone-like Superfamily: Type III secretory system chaperone-like Family: Type III secretory system chaperone
57	c2vt2A		Alignment	not modelled	9.5	15	PDB header: transcription Chain: A: PDB Molecule: redox-sensing transcriptional repressor rex; PDBTitle: structure and functional properties of the bacillus2 subtilis transcriptional repressor rex
58	c3d9sB		Alignment	not modelled	9.4	33	PDB header: membrane protein Chain: B: PDB Molecule: aquaporin-5; PDBTitle: human aquaporin 5 (aqp5) - high resolution x-ray structure
59	d1rfza		Alignment	not modelled	9.4	11	Fold: YutG-like Superfamily: YutG-like Family: YutG-like
60	c2zu6E		Alignment	not modelled	9.4	13	PDB header: hydrolase Chain: E: PDB Molecule: programmed cell death protein 4; PDBTitle: crystal structure of the eif4a-pdcd4 complex
61	c1k82D		Alignment	not modelled	9.3	10	PDB header: hydrolase/dna Chain: D: PDB Molecule: formamidopyrimidine-dna glycosylase; PDBTitle: crystal structure of e.coli formamidopyrimidine-dna2 glycosylase (fpg) covalently trapped with dna
62	c2kqzA		Alignment	not modelled	9.3	4	PDB header: protein binding Chain: A: PDB Molecule: proteasomal ubiquitin receptor adrm1; PDBTitle: fragment of proteasome protein
63	d1xova2		Alignment	not modelled	9.1	13	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: N-acetyl muramoyl-L-alanine amidase-like
64	d1j1ja		Alignment	not modelled	9.1	18	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MogA-like
65	c2qtqB		Alignment	not modelled	9.0	9	PDB header: transcription Chain: B: PDB Molecule: transcriptional regulator, tetr family; PDBTitle: crystal structure of a predicted dna-binding transcriptional regulator2 (saro_1072) from novosphingobium aromaticivorans dsm at 1.85 a3 resolution
66	c3c02A		Alignment	not modelled	8.9	17	PDB header: membrane protein Chain: A: PDB Molecule: aquaglyceroporin; PDBTitle: x-ray structure of the aquaglyceroporin from plasmodium falciparum
67	d1ug8a		Alignment	not modelled	8.8	22	Fold: IF3-like Superfamily: R3H domain Family: R3H domain
68	c2bcxB		Alignment	not modelled	8.8	86	PDB header: calcium binding protein Chain: B: PDB Molecule: ryanodine receptor 1; PDBTitle: crystal structure of calmodulin in complex with a ryanodine2 receptor peptide
69	d1jyaa		Alignment	not modelled	8.6	26	Fold: Secretion chaperone-like Superfamily: Type III secretory system chaperone-like Family: Type III secretory system chaperone
70	d2a4ha1		Alignment	not modelled	8.6	20	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Selenoprotein W-related
71	c2zmeA		Alignment	not modelled	8.5	5	PDB header: protein transport Chain: A: PDB Molecule: vacular-sorting protein snf8; PDBTitle: integrated structural and functional model of the human escrt-ii2 complex
72	c3cuqA		Alignment	not modelled	8.3	5	PDB header: protein transport Chain: A: PDB Molecule: vacular-sorting protein snf8; PDBTitle: integrated structural and functional model of the human escrt-ii2 complex
73	d2cdxa		Alignment	not modelled	8.3	20	Fold: Snake toxin-like Superfamily: Snake toxin-like Family: Snake venom toxins
74	d1rc2a		Alignment	not modelled	8.3	33	Fold: Aquaporin-like Superfamily: Aquaporin-like Family: Aquaporin-like
75	d1y0na		Alignment	not modelled	8.2	11	Fold: YehU-like Superfamily: YehU-like Family: YehU-like
76	c1u0bB		Alignment	not modelled	8.2	13	PDB header: ligase/rna Chain: B: PDB Molecule: cysteinyl trna; PDBTitle: crystal structure of cysteinyl-trna synthetase binary2 complex with trnacys
77	d1dd4c		Alignment	not modelled	8.2	18	Fold: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Superfamily: Ribosomal protein L7/12, oligomerisation (N-terminal) domain Family: Ribosomal protein L7/12, oligomerisation (N-terminal) domain
78	c1amlA		Alignment	not modelled	8.1	27	PDB header: serine protease inhibitor Chain: A: PDB Molecule: amyloid a4; PDBTitle: the alzheimer's disease amyloid a4 peptide (residues 1-40)
79	d1j4na		Alignment	not modelled	8.1	22	Fold: Aquaporin-like Superfamily: Aquaporin-like

						Family: Aquaporin-like
80	d1cksa	Alignment	not modelled	8.1	67	Fold: Cell cycle regulatory proteins Superfamily: Cell cycle regulatory proteins Family: Cell cycle regulatory proteins
81	c2dzrA	Alignment	not modelled	8.1	29	PDB header: transcription Chain: A: PDB Molecule: general transcription factor ii-i repeat domain- PDBTitle: solution structure of rsg1 ruh-067, a gtf2i domain in human2 cdna
82	c1dvpA	Alignment	not modelled	8.0	8	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
83	c2jesG	Alignment	not modelled	8.0	20	PDB header: viral protein Chain: G: PDB Molecule: portal protein; PDBTitle: portal protein from bacteriophage spp1
84	d1u5ta1	Alignment	not modelled	8.0	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
85	d2hxja1	Alignment	not modelled	7.9	22	Fold: FinO-like Superfamily: FinO-like Family: FinO-like
86	c2f2bA	Alignment	not modelled	7.9	33	PDB header: membrane protein Chain: A: PDB Molecule: aquaporin aqpm; PDBTitle: crystal structure of integral membrane protein aquaporin aqpm at 1.68a2 resolution
87	c3ahhA	Alignment	not modelled	7.8	12	PDB header: lyase Chain: A: PDB Molecule: xylulose 5-phosphate/fructose 6-phosphate phosphoketolase; PDBTitle: h142a mutant of phosphoketolase from bifidobacterium breve complexed2 with acetyl thiamine diphosphate
88	c1m5iA	Alignment	not modelled	7.8	13	PDB header: antitumor protein Chain: A: PDB Molecule: apc protein; PDBTitle: crystal structure of the coiled coil region 129-250 of the2 tumor suppressor gene product apc
89	d1hq1a	Alignment	not modelled	7.7	35	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
90	c2yqkA	Alignment	not modelled	7.7	26	PDB header: transcription/apoptosis Chain: A: PDB Molecule: arginine-glutamic acid dipeptide repeats protein; PDBTitle: solution structure of the sant domain in arginine-glutamic2 acid dipeptide (re) repeats
91	c1zaxZ	Alignment	not modelled	7.7	18	PDB header: structural protein Chain: Z: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form b
92	c1zawV	Alignment	not modelled	7.7	18	PDB header: structural protein Chain: V: PDB Molecule: 50s ribosomal protein l7/l12; PDBTitle: ribosomal protein l10-l12(ntd) complex, space group p212121,2 form a
93	d1rkta2	Alignment	not modelled	7.6	12	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
94	c1dfwA	Alignment	not modelled	7.6	54	PDB header: immune system Chain: A: PDB Molecule: lung surfactant protein b; PDBTitle: conformational mapping of the n-terminal segment of2 surfactant protein b in lipid using 13c-enhanced fourier3 transform infrared spectroscopy (ftir)
95	d1qb2a	Alignment	not modelled	7.6	18	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
96	d1sb0a	Alignment	not modelled	7.6	14	Fold: Kix domain of CBP (creb binding protein) Superfamily: Kix domain of CBP (creb binding protein) Family: Kix domain of CBP (creb binding protein)
97	c3llqB	Alignment	not modelled	7.5	25	PDB header: membrane protein Chain: B: PDB Molecule: aquaporin z 2; PDBTitle: aquaporin structure from plant pathogen agrobacterium tumefaciens
98	c2krxA	Alignment	not modelled	7.5	33	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: asl3597 protein; PDBTitle: solution nmr structure of asl3597 from nostoc sp. pcc7120. northeast2 structural genomics consortium target id nsr244.
99	c1jauA	Alignment	not modelled	7.5	33	PDB header: viral protein Chain: A: PDB Molecule: transmembrane glycoprotein (gp41); PDBTitle: nmr solution structure of the trp-rich peptide of hiv gp412 bound to dpc micelles