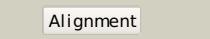
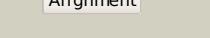
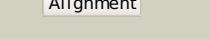
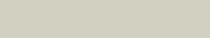
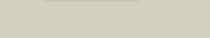
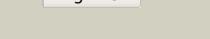


Phyre²

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Description	P30178
Date	Thu Jan 5 11:46:15 GMT 2012
Unique Job ID	7838663664a08e1b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2g8yB_			100.0	97	PDB header: oxidoreductase Chain: B; PDB Molecule: malate/l-lactate dehydrogenases; PDBTitle: the structure of a putative malate/lactate dehydrogenase from e. coli.
2	c3i0pA_			100.0	26	PDB header: oxidoreductase Chain: A; PDB Molecule: malate dehydrogenase; PDBTitle: crystal structure of malate dehydrogenase from entamoeba histolytica
3	c1z2iA_			100.0	28	PDB header: oxidoreductase Chain: A; PDB Molecule: malate dehydrogenase; PDBTitle: crystal structure of agrobacterium tumefaciens malate2 dehydrogenase, new york structural genomics consortium
4	c1vbiA_			100.0	31	PDB header: oxidoreductase Chain: A; PDB Molecule: type 2 malate/lactate dehydrogenase; PDBTitle: crystal structure of type 2 malate/lactate dehydrogenase from thermus2 thermophilus hb8
5	d1rfma_			100.0	32	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
6	d1xrha_			100.0	28	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
7	c1wtjB_			100.0	28	PDB header: oxidoreductase Chain: B; PDB Molecule: ureidoglycolate dehydrogenase; PDBTitle: crystal structure of delta1-piperideine-2-carboxylate2 reductase from pseudomonas syringae pvar.tomato
8	d1nxua_			100.0	24	Fold: L-sulfolactate dehydrogenase-like Superfamily: L-sulfolactate dehydrogenase-like Family: L-sulfolactate dehydrogenase-like
9	c1v9nA_			100.0	32	PDB header: oxidoreductase Chain: A; PDB Molecule: malate dehydrogenase; PDBTitle: structure of malate dehydrogenase from pyrococcus horikoshii ot3
10	c3uoeb_			100.0	26	PDB header: oxidoreductase Chain: B; PDB Molecule: dehydrogenase; PDBTitle: the crystal structure of dehydrogenase from sinorhizobium meliloti
11	d1jmxa1			40.9	14	Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2

12	c3irvA			38.1	9	PDB header: hydrolase Chain: A: PDB Molecule: cysteine hydrolase; PDBTitle: crystal structure of cysteine hydrolase pspph_2384 from pseudomonas2 syringae pv. phaseolicola 1448a
13	c3eefA			34.6	22	PDB header: hydrolase Chain: A: PDB Molecule: n-carbamoylsarcosine amidase related protein; PDBTitle: crystal structure of n-carbamoylsarcosine amidase from thermoplasma2 acidophilum
14	c3kl2K			34.5	13	PDB header: structural genomics, unknown function Chain: K: PDB Molecule: putative isochorismatase; PDBTitle: crystal structure of a putative isochorismatase from streptomyces2 avermitilis
15	c2qiwA			34.2	15	PDB header: transferase Chain: A: PDB Molecule: pep phosphonomutase; PDBTitle: crystal structure of a putative phosphoenolpyruvate phosphonomutase2 (ncgl1015, cgl1060) from corynebacterium glutamicum atcc 13032 at3 1.80 a resolution
16	c2kebA			31.3	19	PDB header: dna binding protein Chain: A: PDB Molecule: dna polymerase subunit alpha b; PDBTitle: nmr solution structure of the n-terminal domain of the dna polymerase2 alpha p68 subunit
17	c2ze3A			30.4	20	PDB header: isomerase Chain: A: PDB Molecule: dfa0005; PDBTitle: crystal structure of dfa0005 complexed with alpha-ketoglutarate: a2 novel member of the icl/pepm superfamily from alkali-tolerant3 deinococcus ficus
18	d3bzra1			28.4	20	Fold: EscU C-terminal domain-like Superfamily: EscU C-terminal domain-like Family: EscU C-terminal domain-like
19	c3bzrA			28.4	20	PDB header: membrane protein, protein transport Chain: A: PDB Molecule: escu; PDBTitle: crystal structure of escu c-terminal domain with n262d mutation, space2 group p 41 21 2
20	c1e0mA			28.2	36	PDB header: de novo protein Chain: A: PDB Molecule: wwprototype; PDBTitle: prototype ww domain
21	c2k29A		not modelled	27.8	12	PDB header: transcription Chain: A: PDB Molecule: antitoxin relB; PDBTitle: structure of the dbd domain of e. coli antitoxin relB
22	c1yiua		not modelled	27.3	50	PDB header: ligase Chain: A: PDB Molecule: itchy e3 ubiquitin protein ligase; PDBTitle: itch e3 ubiquitin ligase ww3 domain
23	c3b8if		not modelled	26.9	14	PDB header: lyase Chain: F: PDB Molecule: pa4872 oxaloacetate decarboxylase; PDBTitle: crystal structure of oxaloacetate decarboxylase from pseudomonas2 aeruginosa (pa4872) in complex with oxalate and mg2+.
24	c3ih1A		not modelled	26.4	21	PDB header: lyase Chain: A: PDB Molecule: methylisocitrate lyase; PDBTitle: crystal structure of carboxyvinyl-carboxyphosphonate phosphorylmutase2 from bacillus anthracis
25	c3ot4F		not modelled	26.2	20	PDB header: hydrolase Chain: F: PDB Molecule: putative isochorismatase; PDBTitle: structure and catalytic mechanism of bordetella bronchiseptica nicf
26	c2b34C		not modelled	25.9	13	PDB header: hydrolase Chain: C: PDB Molecule: mar1 ribonuclease; PDBTitle: structure of mar1 ribonuclease from caenorhabditis elegans
27	c2ysbA		not modelled	25.9	29	PDB header: protein binding Chain: A: PDB Molecule: salvador homolog 1 protein; PDBTitle: solution structure of the first ww domain from the mouse2 salvador homolog 1 protein (sav1)
28	c2jlhA		not modelled	25.7	23	PDB header: protein transport Chain: A: PDB Molecule: yop proteins translocation protein u; PDBTitle: crystal structure of the cytoplasmic domain of yersinia2 pestis yscu n263a mutant

29	c3l4hA		Alignment	not modelled	25.5	17	PDB header: protein binding Chain: A: PDB Molecule: e3 ubiquitin-protein ligase hecwl; PDBTitle: helical box domain and second ww domain of the human e3 ubiquitin-2 protein ligase hecwl
30	d1nf9a		Alignment	not modelled	25.5	11	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
31	d2ebfx2		Alignment	not modelled	25.5	16	Fold: EreA/ChaN-like Superfamily: EreA/ChaN-like Family: PMT domain-like
32	c3t7yB		Alignment	not modelled	24.9	23	PDB header: protein transport Chain: B: PDB Molecule: yop proteins translocation protein u; PDBTitle: structure of an autocleavage-inactive mutant of the cytoplasmic domain2 of ct091, the yscu homologue of chlamydia trachomatis
33	d1nbaa		Alignment	not modelled	24.8	20	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
34	d1vp8a		Alignment	not modelled	24.3	24	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: MTH1675-like
35	c1ymzA		Alignment	not modelled	24.1	50	PDB header: unknown function Chain: A: PDB Molecule: cc45; PDBTitle: cc45, an artificial ww domain designed using statistical2 coupling analysis
36	d1qusa		Alignment	not modelled	23.6	17	Fold: Lysozyme-like Superfamily: Lysozyme-like Family: Bacterial muramidase, catalytic domain
37	d1t57a		Alignment	not modelled	23.2	23	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: MTH1675-like
38	c3mcwA		Alignment	not modelled	23.0	12	PDB header: hydrolase Chain: A: PDB Molecule: putative hydrolase; PDBTitle: crystal structure of an putative hydrolase of the isochorismatase2 family (cv_1320) from chromobacterium violaceum atcc 12472 at 1.06 a3 resolution
39	c2ysdA		Alignment	not modelled	22.7	27	PDB header: protein binding Chain: A: PDB Molecule: membrane-associated guanylate kinase, ww and pdz PDBTitle: solution structure of the first ww domain from the human2 membrane-associated guanylate kinase, ww and pdz domain-3 containing protein 1. magi-1
40	c3i44A		Alignment	not modelled	22.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of aldehyde dehydrogenase from bartonella2 henselae at 2.0a resolution
41	d1yaca		Alignment	not modelled	21.5	8	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
42	d1j2ra		Alignment	not modelled	21.4	18	Fold: Isochorismatase-like hydrolases Superfamily: Isochorismatase-like hydrolases Family: Isochorismatase-like hydrolases
43	d1f8ab1		Alignment	not modelled	21.3	27	Fold: WW domain-like Superfamily: WW domain Family: WW domain
44	c2djyA		Alignment	not modelled	21.0	36	PDB header: ligase/signaling protein Chain: A: PDB Molecule: smad ubiquitination regulatory factor 2; PDBTitle: solution structure of smurf2 ww3 domain-smad7 py peptide2 complex
45	c2hjpA		Alignment	not modelled	20.5	12	PDB header: hydrolase Chain: A: PDB Molecule: phosphonopyruvate hydrolase; PDBTitle: crystal structure of phosphonopyruvate hydrolase complex with2 phosphonopyruvate and mg++
46	d1wh7a		Alignment	not modelled	20.4	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
47	d1k9ra		Alignment	not modelled	20.0	29	Fold: WW domain-like Superfamily: WW domain Family: WW domain
48	c1wr7A		Alignment	not modelled	20.0	47	PDB header: ligase Chain: A: PDB Molecule: nedd4-2; PDBTitle: solution structure of the third ww domain of nedd4-2
49	c3hb7G		Alignment	not modelled	19.9	13	PDB header: hydrolase Chain: G: PDB Molecule: isochorismatase hydrolase; PDBTitle: the crystal structure of an isochorismatase-like hydrolase from2 alkaliphilus metallireducens to 2.3a
50	d1pb9a1		Alignment	not modelled	19.8	17	Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2
51	c2lawA		Alignment	not modelled	19.5	29	PDB header: signaling protein/transcription Chain: A: PDB Molecule: yorkie homolog; PDBTitle: structure of the second ww domain from human yap in complex with a2 human smad1 derived peptide
52	d1lqa		Alignment	not modelled	19.4	13	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)
53	c2gbbA		Alignment	not modelled	19.2	11	PDB header: isomerase Chain: A: PDB Molecule: putative chorismate mutase; PDBTitle: crystal structure of secreted chorismate mutase from2 yersinia pestis
54	c1wr4A		Alignment	not modelled	19.0	29	PDB header: ligase Chain: A: PDB Molecule: ubiquitin-protein ligase nedd4-2; PDBTitle: solution structure of the second ww domain of nedd4-2

55	c2kykA		Alignment	not modelled	18.9	43	PDB header: ligase Chain: A: PDB Molecule: e3 ubiquitin-protein ligase itchy homolog; PDBTitle: the sandwich region between two Imp2a py motif regulates the2 interaction between aip4ww2domain and py motif
56	d3ci0k2		Alignment	not modelled	18.5	19	Fold: SAM domain-like Superfamily: GspK insert domain-like Family: GspK insert domain-like
57	c3iwfA		Alignment	not modelled	18.2	9	PDB header: transcription regulator Chain: A: PDB Molecule: transcription regulator rpir family; PDBTitle: the crystal structure of the n-terminal domain of a rpir2 transcriptional regulator from staphylococcus epidermidis to 1.4a
58	c2jmfa		Alignment	not modelled	18.2	33	PDB header: ligase/signaling protein Chain: A: PDB Molecule: e3 ubiquitin-protein ligase suppressor of deltex; PDBTitle: solution structure of the su(dx) ww4- notch py peptide2 complex
59	c1wmvA		Alignment	not modelled	18.2	28	PDB header: oxidoreductase, apoptosis Chain: A: PDB Molecule: ww domain containing oxidoreductase; PDBTitle: solution structure of the second ww domain of wwox
60	c2p7vA		Alignment	not modelled	17.9	29	PDB header: transcription Chain: A: PDB Molecule: regulator of sigma d; PDBTitle: crystal structure of the escherichia coli regulator of sigma 70, rsd,2 in complex with sigma 70 domain 4
61	d1tk7a1		Alignment	not modelled	17.8	29	Fold: WW domain-like Superfamily: WW domain Family: WW domain
62	c2pmzF		Alignment	not modelled	17.6	20	PDB header: translation, transferase Chain: F: PDB Molecule: dna-directed rna polymerase subunit f; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus
63	d1i5hw		Alignment	not modelled	17.0	36	Fold: WW domain-like Superfamily: WW domain Family: WW domain
64	d2jmfa1		Alignment	not modelled	16.8	36	Fold: WW domain-like Superfamily: WW domain Family: WW domain
65	d1bdga1		Alignment	not modelled	16.6	17	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Hexokinase
66	c2uygF		Alignment	not modelled	16.0	24	PDB header: lyase Chain: F: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: crystallographic structure of the typeii 3-dehydroquinate2 from thermus thermophilus
67	c1zlpA		Alignment	not modelled	15.9	22	PDB header: lyase Chain: A: PDB Molecule: petal death protein; PDBTitle: petal death protein psr132 with cysteine-linked glutaraldehyde forming2 a thiohemiacetal adduct
68	c3e0kA		Alignment	not modelled	15.9	13	PDB header: transferase Chain: A: PDB Molecule: amino-acid acetyltransferase; PDBTitle: crystal structure of c-terminal domain of n-acetylglutamate synthase2 from vibrio parahaemolyticus
69	d2cfua2		Alignment	not modelled	15.5	17	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: Alkylsulfatase-like
70	c3eo0L		Alignment	not modelled	15.1	19	PDB header: lyase Chain: L: PDB Molecule: methylisocitrate lyase; PDBTitle: 2.9a crystal structure of methyl-isocitrate lyase from2 burkholderia pseudomallei
71	c2ez5W		Alignment	not modelled	14.9	33	PDB header: signalling protein,ligase Chain: W: PDB Molecule: e3 ubiquitin-protein ligase nedd4; PDBTitle: solution structure of the dnedd4 ww3* domain- comm lpsy2 peptide complex
72	c2js5B		Alignment	not modelled	14.8	26	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: nmr structure of protein q60c73_metca. northeast structural2 genomics consortium target mcr1
73	c3hn2A		Alignment	not modelled	14.2	11	PDB header: oxidoreductase Chain: A: PDB Molecule: 2-dehydropantoate 2-reductase; PDBTitle: crystal structure of 2-dehydropantoate 2-reductase from geobacter2 metallireducens gs-15
74	c2yshA		Alignment	not modelled	14.1	27	PDB header: protein binding Chain: A: PDB Molecule: growth-arrest-specific protein 7; PDBTitle: solution structure of the ww domain from the human growth-2 arrest-specific protein 7, gas-7
75	c2yy9A		Alignment	not modelled	14.0	31	PDB header: transcription Chain: A: PDB Molecule: zinc finger and btb domain-containing protein 48; PDBTitle: crystal structure of btb domain from mouse hkr3
76	d2csua3		Alignment	not modelled	14.0	17	Fold: Flavodoxin-like Superfamily: Succinyl-CoA synthetase domains Family: Succinyl-CoA synthetase domains
77	c2q81C		Alignment	not modelled	13.6	19	PDB header: transcription Chain: C: PDB Molecule: miz-1 protein; PDBTitle: crystal structure of the miz-1 btb/poz domain
78	c3fa4D		Alignment	not modelled	13.6	20	PDB header: lyase Chain: D: PDB Molecule: 2,3-dimethylmalate lyase; PDBTitle: crystal structure of 2,3-dimethylmalate lyase, a pep mutase/isocitrate2 lyase superfamily member, triclinic crystal form
79	d3djba1		Alignment	not modelled	13.5	17	Fold: HD-domain/PDEase-like Superfamily: HD-domain/PDEase-like Family: HD domain
80	d1xn7a		Alignment	not modelled	13.1	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Hypothetical protein YhgG

81	d1dq3a2		Alignment	not modelled	13.1	32	Fold: dsRBD-like Superfamily: YcfA/nrd intein domain Family: PI-Pfui intein middle domain
82	c3le4A_		Alignment	not modelled	12.9	33	PDB header: nuclear protein Chain: A: PDB Molecule: microprocessor complex subunit dgcr8; PDBTitle: crystal structure of the dgcr8 dimerization domain
83	c1ks9A_		Alignment	not modelled	12.8	11	PDB header: oxidoreductase Chain: A: PDB Molecule: 2-dehydropantoate 2-reductase; PDBTitle: ketopantoate reductase from escherichia coli
84	d1j9ia_		Alignment	not modelled	12.8	25	Fold: Putative DNA-binding domain Superfamily: Putative DNA-binding domain Family: Terminase gpNU1 subunit domain
85	c2r73C_		Alignment	not modelled	12.7	13	PDB header: transport protein Chain: C: PDB Molecule: trichosurin; PDBTitle: crystal structure of the possum milk whey lipocalin2 trichosurin at ph 8.2
86	c2l4jA_		Alignment	not modelled	12.5	33	PDB header: transcription Chain: A: PDB Molecule: yes-associated protein 2 (yap2); PDBTitle: yap ww2
87	d2ieca1		Alignment	not modelled	12.5	17	Fold: MK0786-like Superfamily: MK0786-like Family: MK0786-like
88	d1dzka_		Alignment	not modelled	12.3	23	Fold: Lipocalins Superfamily: Lipocalins Family: Retinol binding protein-like
89	c2jt1A_		Alignment	not modelled	12.2	21	PDB header: transcription Chain: A: PDB Molecule: pefi protein; PDBTitle: solution nmr structure of pefi (plasmid-encoded fimbriae regulatory)2 protein from salmonella typhimurium. northeast structural genomics3 target str82
90	c2h0rD_		Alignment	not modelled	12.2	12	PDB header: hydrolase Chain: D: PDB Molecule: nicotinamidase; PDBTitle: structure of the yeast nicotinamidase pnc1p
91	c3figA_		Alignment	not modelled	12.1	21	PDB header: transport protein Chain: A: PDB Molecule: odorant-binding protein 1f; PDBTitle: odorant binding protein obp1
92	c2px0D_		Alignment	not modelled	12.1	11	PDB header: biosynthetic protein Chain: D: PDB Molecule: flagellar biosynthesis protein flhf; PDBTitle: crystal structure of flhf complexed with gmppnp/mg(2+)
93	c2lfca_		Alignment	not modelled	11.9	29	PDB header: oxidoreductase Chain: A: PDB Molecule: fumarate reductase, flavoprotein subunit; PDBTitle: solution nmr structure of fumarate reductase flavoprotein subunit from2 lactobacillus plantarum, northeast structural genomics consortium3 target lpr145j
94	c3drzE_		Alignment	not modelled	11.9	13	PDB header: unknown function Chain: E: PDB Molecule: bb/poz domain-containing protein kctd5; PDBTitle: x-ray crystal structure of the n-terminal btb domain of human kctd52 protein
95	c3fpvC_		Alignment	not modelled	11.9	21	PDB header: heme binding protein Chain: C: PDB Molecule: extracellular haem-binding protein; PDBTitle: crystal structure of hbps
96	d2i52a1		Alignment	not modelled	11.6	17	Fold: MK0786-like Superfamily: MK0786-like Family: MK0786-like
97	d1bj7a_		Alignment	not modelled	11.4	13	Fold: Lipocalins Superfamily: Lipocalins Family: Retinol binding protein-like
98	c2fq1A_		Alignment	not modelled	11.4	15	PDB header: hydrolase Chain: A: PDB Molecule: isochorismatase; PDBTitle: crystal structure of the two-domain non-ribosomal peptide synthetase2 entb containing isochorismate lyase and aryl-carrier protein domains
99	c2laza_		Alignment	not modelled	11.4	29	PDB header: signaling protein/transcription Chain: A: PDB Molecule: e3 ubiquitin-protein ligase smurf1; PDBTitle: structure of the first ww domain of human smurf1 in complex with a2 mono-phosphorylated human smad1 derived peptide