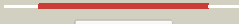



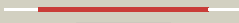


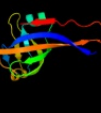
















#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1pt1B_	 Alignment		100.0	99	PDB header: lyase Chain: B; PDB Molecule: aspartate 1-decarboxylase; PDBTitle: unprocessed pyruvoyl dependent aspartate decarboxylase with histidine2 11 mutated to alanine
2	c2c45F_	 Alignment		100.0	50	PDB header: lyase Chain: F; PDB Molecule: aspartate 1-decarboxylase precursor; PDBTitle: native precursor of pyruvoyl dependent aspartate2 decarboxylase
3	dlppya_	 Alignment		100.0	100	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Pyruvoyl dependent aspartate decarboxylase, ADC
4	c3ougA_	 Alignment		100.0	32	PDB header: lyase Chain: A; PDB Molecule: aspartate 1-decarboxylase; PDBTitle: crystal structure of cleaved l-aspartate-alpha-decarboxylase from <i>Francisella tularensis</i>
5	c1vc3B_	 Alignment		100.0	45	PDB header: lyase Chain: B; PDB Molecule: l-aspartate-alpha-decarboxylase heavy chain; PDBTitle: crystal structure of l-aspartate-alpha-decarboxylase
6	c3plxB_	 Alignment		100.0	42	PDB header: lyase Chain: B; PDB Molecule: aspartate 1-decarboxylase; PDBTitle: the crystal structure of aspartate alpha-decarboxylase from <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> nctc 11168
7	c1pyuD_	 Alignment		100.0	100	PDB header: lyase Chain: D; PDB Molecule: aspartate 1-decarboxylase alfa chain; PDBTitle: processed aspartate decarboxylase mutant with ser25 mutated to cys
8	c1uheA_	 Alignment		100.0	34	PDB header: lyase Chain: A; PDB Molecule: aspartate 1-decarboxylase alpha chain; PDBTitle: crystal structure of aspartate decarboxylase, isoasparagine complex
9	c2pjhB_	 Alignment		96.5	12	PDB header: transport protein Chain: B; PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: strctural model of the p97 n domain- npl4 ubd complex
10	c1cz5A_	 Alignment		93.1	18	PDB header: hydrolase Chain: A; PDB Molecule: vcp-like atpase; PDBTitle: nmr structure of vat-n: the n-terminal domain of vat (vcp-2 like atpase of thermoplasma)
11	dlcz5a1	 Alignment		82.2	14	Fold: Double psi beta-barrel Superfamily: ADC-like Family: Cdc48 N-terminal domain-like

12	c3mt1B_	Alignment		74.9	15	PDB header: lyase Chain: B: PDB Molecule: putative carboxynorspermidine decarboxylase protein; PDBTitle: crystal structure of putative carboxynorspermidine decarboxylase2 protein from sinorhizobium meliloti
13	c1tufA_	Alignment		70.7	16	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure of diaminopimelate decarboxylase from m.2 jannaschi
14	c3krtC_	Alignment		65.5	13	PDB header: oxidoreductase Chain: C: PDB Molecule: crotonyl coa reductase; PDBTitle: crystal structure of putative crotonyl coa reductase from streptomyces2 coelicolor a3(2)
15	c2yxxA_	Alignment		63.9	10	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure analysis of diaminopimelate decarboxylate (lysa)
16	c2glwA_	Alignment		60.5	33	PDB header: transcription Chain: A: PDB Molecule: 92aa long hypothetical protein; PDBTitle: the solution structure of phs018 from pyrococcus horikoshii
17	c2o0tB_	Alignment		57.8	12	PDB header: lyase Chain: B: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: the three dimensional structure of diaminopimelate decarboxylase from2 mycobacterium tuberculosis reveals a tetrameric enzyme organisation
18	c4a10A_	Alignment		57.2	23	PDB header: oxidoreductase Chain: A: PDB Molecule: octenoyl-coa reductase/carboxylase; PDBTitle: apo-structure of 2-octenoyl-coa carboxylase reductase cinf from2 streptomyces sp.
19	c2ejvA_	Alignment		55.4	19	PDB header: oxidoreductase Chain: A: PDB Molecule: l-threonine 3-dehydrogenase; PDBTitle: crystal structure of threonine 3-dehydrogenase complexed with nad+
20	d1qw1a1	Alignment		53.2	16	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: FeoA-like
21	c1h2bA_	Alignment	not modelled	50.6	20	PDB header: oxidoreductase Chain: A: PDB Molecule: alcohol dehydrogenase; PDBTitle: crystal structure of the alcohol dehydrogenase from the2 hyperthermophilic archaeon aeropyrum pernix at 1.65a3 resolution
22	d1ylea1	Alignment	not modelled	50.5	21	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: AstA-like
23	c1kevB_	Alignment	not modelled	50.2	17	PDB header: oxidoreductase Chain: B: PDB Molecule: nadp-dependent alcohol dehydrogenase; PDBTitle: structure of nadp-dependent alcohol dehydrogenase
24	c2eihA_	Alignment	not modelled	50.1	20	PDB header: oxidoreductase Chain: A: PDB Molecule: alcohol dehydrogenase; PDBTitle: crystal structure of nad-dependent alcohol dehydrogenase
25	c2ouiB_	Alignment	not modelled	47.8	26	PDB header: oxidoreductase Chain: B: PDB Molecule: nadp-dependent alcohol dehydrogenase; PDBTitle: d275p mutant of alcohol dehydrogenase from protozoa entamoeba2 histolytica
26	c2p3eA_	Alignment	not modelled	46.9	15	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure of aq1208 from aquifex aeolicus
27	c2xaaC_	Alignment	not modelled	45.5	17	PDB header: oxidoreductase Chain: C: PDB Molecule: secondary alcohol dehydrogenase; PDBTitle: alcohol dehydrogenase adh-'a' from rhodococcus ruber dsm2 44541 at ph 8.5 in complex with nad and butane-1,4-diol
28	c2dfvB_	Alignment	not modelled	43.1	17	PDB header: oxidoreductase Chain: B: PDB Molecule: probable l-threonine 3-dehydrogenase; PDBTitle: hyperthermophilic threonine dehydrogenase from pyrococcus horikoshii
29	c2vwrA_	Alignment	not modelled	42.6	19	PDB header: protein-binding Chain: A: PDB Molecule: ligand of numb protein x 2; PDBTitle: crystal structure of the second pdz domain of numb-

					binding2 protein 2
30	dlwrua1	Alignment	not modelled	42.4	21 Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
31	cle3jA_	Alignment	not modelled	42.2	17 PDB header: oxidoreductase Chain: A: PDB Molecule: nadp(h)-dependent ketose reductase; PDBTitle: ketose reductase (sorbitol dehydrogenase) from silverleaf2 whitefly
32	c1r37B_	Alignment	not modelled	41.6	17 PDB header: oxidoreductase Chain: B: PDB Molecule: nad-dependent alcohol dehydrogenase; PDBTitle: alcohol dehydrogenase from sulfolobus solfataricus2 complexed with nad(h) and 2-ethoxyethanol
33	c1piwA_	Alignment	not modelled	41.2	13 PDB header: oxidoreductase Chain: A: PDB Molecule: hypothetical zinc-type alcohol dehydrogenase- PDBTitle: apo and holo structures of an nadp(h)-dependent cinnamyl2 alcohol dehydrogenase from saccharomyces cerevisiae
34	c1lluD_	Alignment	not modelled	40.7	24 PDB header: oxidoreductase Chain: D: PDB Molecule: alcohol dehydrogenase; PDBTitle: the ternary complex of pseudomonas aeruginosa alcohol2 dehydrogenase with its coenzyme and weak substrate
35	c2j66A_	Alignment	not modelled	39.4	10 PDB header: lyase Chain: A: PDB Molecule: btrk; PDBTitle: structural characterisation of btrk decarboxylase from2 butirosin biosynthesis
36	c1pl6A_	Alignment	not modelled	36.6	17 PDB header: oxidoreductase Chain: A: PDB Molecule: sorbitol dehydrogenase; PDBTitle: human sdh/nadh/inhibitor complex
37	c1p0fA_	Alignment	not modelled	36.0	28 PDB header: oxidoreductase Chain: A: PDB Molecule: nadp-dependent alcohol dehydrogenase; PDBTitle: crystal structure of the binary complex: nadp(h)-dependent vertebrate2 alcohol dehydrogenase (adh8) with the cofactor nadp
38	c3n29A_	Alignment	not modelled	34.7	13 PDB header: lyase Chain: A: PDB Molecule: carboxynorspermidine decarboxylase; PDBTitle: crystal structure of carboxynorspermidine decarboxylase complexed with2 norspermidine from campylobacter jejuni
39	d3cdda1	Alignment	not modelled	34.6	24 Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
40	c1kolA_	Alignment	not modelled	33.7	15 PDB header: oxidoreductase Chain: A: PDB Molecule: formaldehyde dehydrogenase; PDBTitle: crystal structure of formaldehyde dehydrogenase
41	d1uufa1	Alignment	not modelled	33.6	14 Fold: GroES-like Superfamily: GroES-like Family: Alcohol dehydrogenase-like, N-terminal domain
42	d1hkva1	Alignment	not modelled	33.5	9 Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
43	c1yqxB_	Alignment	not modelled	33.4	18 PDB header: oxidoreductase Chain: B: PDB Molecule: sinapyl alcohol dehydrogenase; PDBTitle: sinapyl alcohol dehydrogenase at 2.5 angstrom resolution
44	d1nxza1	Alignment	not modelled	33.0	18 Fold: PUA domain-like Superfamily: PUA domain-like Family: YggJ N-terminal domain-like
45	d3d37a2	Alignment	not modelled	32.2	18 Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
46	d1pl8a1	Alignment	not modelled	30.9	18 Fold: GroES-like Superfamily: GroES-like Family: Alcohol dehydrogenase-like, N-terminal domain
47	c2hcyD_	Alignment	not modelled	30.7	15 PDB header: oxidoreductase Chain: D: PDB Molecule: alcohol dehydrogenase 1; PDBTitle: yeast alcohol dehydrogenase i, saccharomyces cerevisiae fermentative2 enzyme
48	c1cdoB_	Alignment	not modelled	30.4	17 PDB header: oxidoreductase (ch-oh(d)-nad(a)) Chain: B: PDB Molecule: alcohol dehydrogenase; PDBTitle: alcohol dehydrogenase (e.c.1.1.1.1) (ee isozyme) complexed with2 nicotinamide adenine dinucleotide (nad), and zinc
49	d2csja1	Alignment	not modelled	30.1	28 Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
50	c1uufA_	Alignment	not modelled	29.9	15 PDB header: oxidoreductase Chain: A: PDB Molecule: zinc-type alcohol dehydrogenase-like protein PDBTitle: crystal structure of a zinc-type alcohol dehydrogenase-like2 protein yakh
51	d1ejja_	Alignment	not modelled	29.1	14 Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
52	c3g7kD_	Alignment	not modelled	27.9	25 PDB header: isomerase Chain: D: PDB Molecule: 3-methylitaconate isomerase; PDBTitle: crystal structure of methylitaconate-delta-isomerase
53	d1uija1	Alignment	not modelled	27.8	10 Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
54	c3m6iA_	Alignment	not modelled	27.3	16 PDB header: oxidoreductase Chain: A: PDB Molecule: l-arabinitol 4-dehydrogenase; PDBTitle: l-arabinitol 4-dehydrogenase
55	c1knwA_	Alignment	not modelled	27.2	8 PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure of diaminopimelate decarboxylase

56	d1knwa1	Alignment	not modelled	26.8	8	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
57	c2vwpA	Alignment	not modelled	26.5	18	PDB header: oxidoreductase Chain: A: PDB Molecule: glucose dehydrogenase; PDBTitle: haloferax mediterranei glucose dehydrogenase in complex2 with nadph and zn.
58	c3ggeA	Alignment	not modelled	26.5	28	PDB header: protein binding Chain: A: PDB Molecule: pdz domain-containing protein gipc2; PDBTitle: crystal structure of the pdz domain of pdz domain-containing protein2 gipc2
59	c3uogB	Alignment	not modelled	26.3	24	PDB header: oxidoreductase Chain: B: PDB Molecule: alcohol dehydrogenase; PDBTitle: crystal structure of putative alcohol dehydrogenase from sinorhizobium2 meliloti 1021
60	d1rv3a	Alignment	not modelled	26.1	14	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
61	d1uepa	Alignment	not modelled	25.8	17	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
62	c2dphA	Alignment	not modelled	25.6	15	PDB header: oxidoreductase Chain: A: PDB Molecule: formaldehyde dismutase; PDBTitle: crystal structure of formaldehyde dismutase
63	c1rjwA	Alignment	not modelled	25.2	27	PDB header: oxidoreductase Chain: A: PDB Molecule: alcohol dehydrogenase; PDBTitle: crystal structure of nad(+)-dependent alcohol dehydrogenase2 from bacillus stearothermophilus strain lld-r
64	d2a7va1	Alignment	not modelled	25.1	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
65	c2a7vA	Alignment	not modelled	25.1	17	PDB header: transferase Chain: A: PDB Molecule: serine hydroxymethyltransferase; PDBTitle: human mitochondrial serine hydroxymethyltransferase 2
66	c3n0lA	Alignment	not modelled	25.1	18	PDB header: transferase Chain: A: PDB Molecule: serine hydroxymethyltransferase; PDBTitle: crystal structure of serine hydroxymethyltransferase from2 campylobacter jejuni
67	c3n2bD	Alignment	not modelled	24.5	13	PDB header: lyase Chain: D: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: 1.8 angstrom resolution crystal structure of diaminopimelate2 decarboxylase (lysa) from vibrio cholerae.
68	c2cf5A	Alignment	not modelled	24.2	21	PDB header: oxidoreductase Chain: A: PDB Molecule: cinnamyl alcohol dehydrogenase; PDBTitle: crystal structures of the arabidopsis cinnamyl alcohol2 dehydrogenases, atcad5
69	d1kwaa	Alignment	not modelled	23.7	28	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
70	d1kola1	Alignment	not modelled	23.7	14	Fold: GroES-like Superfamily: GroES-like Family: Alcohol dehydrogenase-like, N-terminal domain
71	c1f8fA	Alignment	not modelled	23.3	33	PDB header: oxidoreductase Chain: A: PDB Molecule: benzyl alcohol dehydrogenase; PDBTitle: crystal structure of benzyl alcohol dehydrogenase from acinetobacter2 calcoaceticus
72	d1ee6a	Alignment	not modelled	23.2	29	Fold: Single-stranded right-handed beta-helix Superfamily: Pectin lyase-like Family: Pectate lyase-like
73	c1ma0B	Alignment	not modelled	23.2	23	PDB header: oxidoreductase Chain: B: PDB Molecule: glutathione-dependent formaldehyde dehydrogenase; PDBTitle: ternary complex of human glutathione-dependent formaldehyde2 dehydrogenase with nad+ and dodecanoic acid
74	c3cosD	Alignment	not modelled	23.1	24	PDB header: oxidoreductase Chain: D: PDB Molecule: alcohol dehydrogenase 4; PDBTitle: crystal structure of human class ii alcohol dehydrogenase (adh4) in2 complex with nad and zn
75	c3bk7A	Alignment	not modelled	23.1	28	PDB header: hydrolase/translation Chain: A: PDB Molecule: abc transporter atp-binding protein; PDBTitle: structure of the complete abce1/rnaase-l inhibitor protein2 from pyrococcus abyssi
76	c3hu2C	Alignment	not modelled	22.5	12	PDB header: transport protein Chain: C: PDB Molecule: transitional endoplasmic reticulum atpase; PDBTitle: structure of p97 n-d1 r86a mutant in complex with atpgs
77	c2xkB	Alignment	not modelled	22.3	35	PDB header: structural protein Chain: B: PDB Molecule: disks large homolog 4; PDBTitle: single particle analysis of psd-95 in negative stain
78	d1uika1	Alignment	not modelled	22.3	7	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
79	c2qg1A	Alignment	not modelled	22.3	18	PDB header: signaling protein Chain: A: PDB Molecule: multiple pdz domain protein; PDBTitle: crystal structure of the 11th pdz domain of mpdz (mupp1)
80	d1bj4a	Alignment	not modelled	22.1	17	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
81	c1hf3A	Alignment	not modelled	22.0	28	PDB header: oxidoreductase Chain: A: PDB Molecule: alcohol dehydrogenase e chain; PDBTitle: atomic x-ray structure of liver alcohol dehydrogenase2 containing cadmium and a hydroxide adduct to nadh
						Fold: PDZ domain-like

82	d1mfga_	Alignment	not modelled	21.9	26	Superfamily: PDZ domain-like Family: PDZ domain
83	c1d7kB_	Alignment	not modelled	21.7	12	PDB header: lyase Chain: B: PDB Molecule: human ornithine decarboxylase; PDBTitle: crystal structure of human ornithine decarboxylase at 2.12 angstroms resolution
84	c3cyyA_	Alignment	not modelled	21.3	33	PDB header: peptide binding protein Chain: A: PDB Molecule: tight junction protein zo-1; PDBTitle: the crystal structure of zo-1 pdz2 in complex with the cx43 peptide
85	d2f4pa1	Alignment	not modelled	21.2	26	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: TM1287-like
86	c3ecdC_	Alignment	not modelled	21.0	20	PDB header: transferase Chain: C: PDB Molecule: serine hydroxymethyltransferase 2; PDBTitle: crystal structure of serine hydroxymethyltransferase from burkholderia2 pseudomallei
87	d1a8pa1	Alignment	not modelled	20.8	15	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Riboflavin synthase domain-like Family: Ferredoxin reductase FAD-binding domain-like
88	d2h3la1	Alignment	not modelled	20.0	26	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
89	d1wifa_	Alignment	not modelled	19.7	35	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
90	d2byga1	Alignment	not modelled	19.3	39	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
91	d1uija2	Alignment	not modelled	19.3	10	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein
92	d2f0aa1	Alignment	not modelled	19.1	33	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
93	d1ujda_	Alignment	not modelled	19.0	28	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
94	d1f3ta1	Alignment	not modelled	19.0	9	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Eukaryotic ODC-like
95	c1u37A_	Alignment	not modelled	18.8	20	PDB header: protein transport Chain: A: PDB Molecule: amyloid beta a4 precursor protein-binding, PDBTitle: auto-inhibition mechanism of x11s/mints family scaffold2 proteins revealed by the closed conformation of the tandem3 pdz domains
96	c1u38A_	Alignment	not modelled	18.8	20	PDB header: protein transport Chain: A: PDB Molecule: amyloid beta a4 precursor protein-binding, PDBTitle: auto-inhibition mechanism of x11s/mints family scaffold2 proteins revealed by the closed conformation of the tandem3 pdz domains
97	c3b70A_	Alignment	not modelled	18.7	16	PDB header: oxidoreductase Chain: A: PDB Molecule: enoyl reductase; PDBTitle: crystal structure of aspergillus terreus trans-acting lovastatin2 polyketide enoyl reductase (lovC) with bound nadp
98	d1qaua_	Alignment	not modelled	18.6	30	Fold: PDZ domain-like Superfamily: PDZ domain-like Family: PDZ domain
99	d1dgwa_	Alignment	not modelled	18.5	12	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: Germin/Seed storage 7S protein