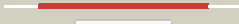



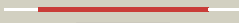



















Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD1599_(hisD)_1799590_1800906
Date	Fri Aug 2 13:30:19 BST 2019
Unique Job ID	8ba1e92f51f37161

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c6an0A_	Alignment 		100.0	32	PDB header: oxidoreductase Chain: A: PDB Molecule: histidinol dehydrogenase; PDBTitle: crystal structure of histidinol dehydrogenase from elizabethkingia2 anophelis
2	d1k75a_	Alignment 		100.0	38	Fold: ALDH-like Superfamily: ALDH-like Family: L-histidinol dehydrogenase HisD
3	c5vldC_	Alignment 		100.0	39	PDB header: oxidoreductase Chain: C: PDB Molecule: histidinol dehydrogenase, chloroplastic; PDBTitle: crystal structure of medicago truncatula l-histidinol dehydrogenase in2 complex with l-histidine and nad+
4	c4g07A_	Alignment 		100.0	43	PDB header: oxidoreductase Chain: A: PDB Molecule: histidinol dehydrogenase; PDBTitle: the crystal structure of the c366s mutant of hdh from brucella suis
5	c4gicB_	Alignment 		100.0	41	PDB header: oxidoreductase Chain: B: PDB Molecule: histidinol dehydrogenase; PDBTitle: crystal structure of a putative histidinol dehydrogenase (target psi-2 014034) from methylococcus capsulatus
6	c4go4E_	Alignment 		98.7	16	PDB header: oxidoreductase Chain: E: PDB Molecule: putative gamma-hydroxymuconic semialdehyde dehydrogenase; PDBTitle: crystal structure of pnpe in complex with nicotinamide adenine2 dinucleotide
7	c2w8qA_	Alignment 		98.6	14	PDB header: oxidoreductase Chain: A: PDB Molecule: succinate-semialdehyde dehydrogenase, PDBTitle: the crystal structure of human ssadh in complex with ssa.
8	d1ky8a_	Alignment 		98.6	17	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
9	c4jbeA_	Alignment 		98.5	16	PDB header: oxidoreductase Chain: A: PDB Molecule: gamma-glutamyl phosphate reductase; PDBTitle: 1.95 angstrom crystal structure of gamma-glutamyl phosphate reductase2 from saccharomonospora viridis.
10	c5mz5A_	Alignment 		98.5	17	PDB header: oxidoreductase Chain: A: PDB Molecule: aldh21); PDBTitle: crystal structure of aldehyde dehydrogenase 21 (aldh21) from2 physcomitrella patens in its apofom
11	d1bxsa_	Alignment 		98.5	17	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like

12	c3vz0B_	Alignment		98.5	15	PDB header: oxidoreductase Chain: B: PDB Molecule: putative nad-dependent aldehyde dehydrogenase; PDBTitle: structural insights into cofactor and substrate selection by gox0499
13	c3k9dD_	Alignment		98.5	15	PDB header: oxidoreductase Chain: D: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of probable aldehyde dehydrogenase from listeria2 monocytogenes egd-e
14	c3lnsD_	Alignment		98.4	18	PDB header: oxidoreductase Chain: D: PDB Molecule: benzaldehyde dehydrogenase; PDBTitle: benzaldehyde dehydrogenase, a class 3 aldehyde dehydrogenase, with2 bound nadp+ and benzoate adduct
15	c3efvC_	Alignment		98.4	18	PDB header: oxidoreductase Chain: C: PDB Molecule: putative succinate-semialdehyde dehydrogenase; PDBTitle: crystal structure of a putative succinate-semialdehyde dehydrogenase2 from salmonella typhimurium lt2 with bound nad
16	c4h7nA_	Alignment		98.4	18	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde dehydrogenase; PDBTitle: the structure of putative aldehyde dehydrogenase puta from anaebaena2 variabilis.
17	d1euha_	Alignment		98.4	14	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
18	c5j6bB_	Alignment		98.3	16	PDB header: oxidoreductase Chain: B: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of aldehyde dehydrogenase from burkholderia2 thailandensis in covalent complex with nadph
19	d1ag8a_	Alignment		98.3	16	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
20	c5vbfH_	Alignment		98.2	17	PDB header: oxidoreductase Chain: H: PDB Molecule: nad-dependent succinate-semialdehyde dehydrogenase; PDBTitle: crystal structure of succinate semialdehyde dehydrogenase from2 burkholderia vietnamiensis
21	c5j78B_	Alignment	not modelled	98.2	15	PDB header: oxidoreductase Chain: B: PDB Molecule: acetaldehyde dehydrogenase (acetylating); PDBTitle: crystal structure of an acetylating aldehyde dehydrogenase from2 geobacillus thermoglucosidasius
22	c5nnoA_	Alignment	not modelled	98.2	14	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde dehydrogenase; PDBTitle: structure of tbalhd3 complexed with nad and an3057 aldehyde
23	c3rosA_	Alignment	not modelled	98.2	15	PDB header: oxidoreductase Chain: A: PDB Molecule: nad-dependent aldehyde dehydrogenase; PDBTitle: crystal structure of nad-dependent aldehyde dehydrogenase from2 lactobacillus acidophilus
24	c5iuuA_	Alignment	not modelled	98.1	16	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde dehydrogenase family protein; PDBTitle: crystal structure of indole-3-acetaldehyde dehydrogenase in apo form
25	c4itaA_	Alignment	not modelled	98.1	15	PDB header: oxidoreductase Chain: A: PDB Molecule: succinate-semialdehyde dehydrogenase; PDBTitle: structure of bacterial enzyme in complex with cofactor
26	d1o04a_	Alignment	not modelled	98.1	16	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
27	c3prlD_	Alignment	not modelled	98.1	15	PDB header: oxidoreductase Chain: D: PDB Molecule: nadp-dependent glyceraldehyde-3-phosphate dehydrogenase; PDBTitle: crystal structure of nadp-dependent glyceraldehyde-3-phosphate2 dehydrogenase from bacillus halodurans c-125
28	c1vlvB_	Alignment	not modelled	98.0	10	PDB header: oxidoreductase Chain: B: PDB Molecule: gamma-glutamyl phosphate reductase; PDBTitle: crystal structure of gamma-glutamyl phosphate reductase (yor323c) from2 saccharomyces cerevisiae at 2.40 a

						resolution
29	c3k2wD_	Alignment	not modelled	98.0	15	PDB header: oxidoreductase Chain: D: PDB Molecule: betaine-aldehyde dehydrogenase; PDBTitle: crystal structure of betaine-aldehyde dehydrogenase from2 pseudoalteromonas atlantica t6c
30	c4o5hD_	Alignment	not modelled	98.0	18	PDB header: oxidoreductase Chain: D: PDB Molecule: phenylacetaldehyde dehydrogenase; PDBTitle: x-ray crystal structure of a putative phenylacetaldehyde dehydrogenase2 from burkholderia cenocepacia
31	c5tjrE_	Alignment	not modelled	98.0	18	PDB header: oxidoreductase Chain: E: PDB Molecule: methylmalonate-semialdehyde dehydrogenase; PDBTitle: x-ray crystal structure of a methylmalonate semialdehyde dehydrogenase2 from pseudomonas sp. aac
32	c4jz6A_	Alignment	not modelled	98.0	11	PDB header: oxidoreductase Chain: A: PDB Molecule: salicylaldehyde dehydrogenase nahf; PDBTitle: crystal structure of a salicylaldehyde dehydrogenase from pseudomonas2 putida g7 complexed with salicylaldehyde
33	c3ek1C_	Alignment	not modelled	98.0	14	PDB header: oxidoreductase Chain: C: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of aldehyde dehydrogenase from brucella2 melitensis biovar abortus 2308
34	c4dalB_	Alignment	not modelled	98.0	19	PDB header: oxidoreductase Chain: B: PDB Molecule: putative aldehyde dehydrogenase; PDBTitle: crystal structure of putative aldehyde dehydrogenase from2 sinorhizobium meliloti 1021
35	c5izdE_	Alignment	not modelled	98.0	15	PDB header: oxidoreductase Chain: E: PDB Molecule: d-glyceraldehyde dehydrogenase (nadp(+)); PDBTitle: wild-type glyceraldehyde dehydrogenase from thermoplasma acidophilum2 in complex with nadp
36	c3u4jB_	Alignment	not modelled	98.0	18	PDB header: oxidoreductase Chain: B: PDB Molecule: nad-dependent aldehyde dehydrogenase; PDBTitle: crystal structure of nad-dependent aldehyde dehydrogenase from2 sinorhizobium meliloti
37	c5jfnA_	Alignment	not modelled	97.9	18	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of rhodospseudomonas palustris propionaldehyde2 dehydrogenase with bound coa and acylated cys330
38	c4pxnB_	Alignment	not modelled	97.9	13	PDB header: oxidoreductase Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: structure of zm ald7 in complex with nad
39	c4qyID_	Alignment	not modelled	97.9	16	PDB header: oxidoreductase Chain: D: PDB Molecule: aldehyde dehydrogenase; PDBTitle: structure of phenylacetaldehyde dehydrogenase from pseudomonas putida2 s12
40	c4lihG_	Alignment	not modelled	97.9	21	PDB header: oxidoreductase Chain: G: PDB Molecule: gamma-glutamyl-gamma-aminobutyraldehyde dehydrogenase; PDBTitle: the crystal structure of gamma-glutamyl-gamma-aminobutyraldehyde2 dehydrogenase from burkholderia cenocepacia j2315
41	c3pqaA_	Alignment	not modelled	97.9	16	PDB header: oxidoreductase Chain: A: PDB Molecule: lactaldehyde dehydrogenase; PDBTitle: crystal structure of glyceraldehyde-3-phosphate dehydrogenase gapn2 from methanocaldococcus jannaschii dsm 2661
42	c2d4eB_	Alignment	not modelled	97.9	17	PDB header: oxidoreductase Chain: B: PDB Molecule: 5-carboxymethyl-2-hydroxyuconate semialdehyde PDBTitle: crystal structure of the hpcc from thermus thermophilus hb8
43	c2jg7G_	Alignment	not modelled	97.9	19	PDB header: oxidoreductase Chain: G: PDB Molecule: antiquitin; PDBTitle: crystal structure of seabream antiquitin and elucidation of2 its substrate specificity
44	c3r31A_	Alignment	not modelled	97.9	16	PDB header: oxidoreductase Chain: A: PDB Molecule: betaine aldehyde dehydrogenase; PDBTitle: crystal structure of betaine aldehyde dehydrogenase from agrobacterium2 tumefaciens
45	c4yweE_	Alignment	not modelled	97.9	19	PDB header: oxidoreductase Chain: E: PDB Molecule: putative aldehyde dehydrogenase; PDBTitle: crystal structure of a putative aldehyde dehydrogenase from2 burkholderia cenocepacia
46	d1wnda_	Alignment	not modelled	97.8	19	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
47	c4pxlB_	Alignment	not modelled	97.8	18	PDB header: oxidoreductase Chain: B: PDB Molecule: cytosolic aldehyde dehydrogenase rf2c; PDBTitle: structure of zm ald2-3 (rf2c) in complex with nad
48	c5x5uB_	Alignment	not modelled	97.8	17	PDB header: oxidoreductase Chain: B: PDB Molecule: alpha-ketoglutaric semialdehyde dehydrogenase; PDBTitle: crystal structure of alpha-ketoglutarate-semialdehyde dehydrogenase2 (kgsadh) complexed with nad
49	d1a4sa_	Alignment	not modelled	97.8	17	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
50	c3iwkB_	Alignment	not modelled	97.8	19	PDB header: oxidoreductase Chain: B: PDB Molecule: aminoaldehyde dehydrogenase; PDBTitle: crystal structure of aminoaldehyde dehydrogenase 1 from pisum sativum2 (psamadh1)
51	c5fhzF_	Alignment	not modelled	97.8	14	PDB header: oxidoreductase Chain: F: PDB Molecule: aldehyde dehydrogenase family 1 member a3; PDBTitle: human aldehyde dehydrogenase 1a3 complexed with nad(+) and retinoic2 acid
52	c4i3wC_	Alignment	not modelled	97.8	17	PDB header: oxidoreductase Chain: C: PDB Molecule: aldehyde dehydrogenase (nad+);

52	c4j5wC_	Alignment	not modelled	97.8	17	PDBTitle: structure of phosphonoacetaldehyde dehydrogenase in complex with 2 glycerinaldehyde-3-phosphate and cofactor nad+ PDB header: oxidoreductase
53	c3v4cB_	Alignment	not modelled	97.8	15	Chain: B; PDB Molecule: aldehyde dehydrogenase (nadp+); PDBTitle: crystal structure of a semialdehyde dehydrogenase from sinorhizobium2 melloti 1021
54	c4qgkB_	Alignment	not modelled	97.7	13	PDB header: oxidoreductase Chain: B; PDB Molecule: fatty aldehyde dehydrogenase; PDBTitle: structure of the human sjogren larsson syndrome enzyme fatty aldehyde2 dehydrogenase (faldh)
55	c6fk3B_	Alignment	not modelled	97.7	14	PDB header: oxidoreductase Chain: B; PDB Molecule: aldehyde dehydrogenase; PDBTitle: structure and function of aldehyde dehydrogenase from thermus2 thermophilus: an enzyme with an evolutionarily-distinct c-terminal3 arm (recombinant full-length protein in complex with propanal)
56	c3jz4C_	Alignment	not modelled	97.7	14	PDB header: oxidoreductase Chain: C; PDB Molecule: succinate-semialdehyde dehydrogenase [nadp+]; PDBTitle: crystal structure of e. coli nadp dependent enzyme
57	c3ifgH_	Alignment	not modelled	97.7	14	Chain: H; PDB Molecule: succinate-semialdehyde dehydrogenase (nadp+); PDBTitle: crystal structure of succinate-semialdehyde dehydrogenase from2 burkholderia pseudomallei, part 1 of 2
58	c4i25B_	Alignment	not modelled	97.7	18	PDB header: oxidoreductase Chain: B; PDB Molecule: 2-aminomuconate 6-semialdehyde dehydrogenase; PDBTitle: 2.00 angstroms x-ray crystal structure of nad- and substrate-bound 2-2 aminomuconate 6-semialdehyde dehydrogenase from pseudomonas3 fluorescens
59	d1o20a_	Alignment	not modelled	97.7	15	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
60	d1o9ja_	Alignment	not modelled	97.7	16	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
61	d1ad3a_	Alignment	not modelled	97.6	13	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
62	c4pt3C_	Alignment	not modelled	97.6	12	PDB header: oxidoreductase Chain: C; PDB Molecule: aldehyde dehydrogenase; PDBTitle: nadph complex structure of aldehyde dehydrogenase from bacillus cereus
63	c4zz7E_	Alignment	not modelled	97.6	19	PDB header: oxidoreductase Chain: E; PDB Molecule: methylmalonate-semialdehyde dehydrogenase; PDBTitle: crystal structure of methylmalonate-semialdehyde dehydrogenase (dddc)2 from oceanimonas doudoroffii
64	d1vlua_	Alignment	not modelled	97.5	11	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
65	c5u0mB_	Alignment	not modelled	97.5	17	PDB header: oxidoreductase Chain: B; PDB Molecule: n-succinylglutamate 5-semialdehyde dehydrogenase; PDBTitle: fatty aldehyde dehydrogenase from marinobacter aquaeolei vt8 and2 cofactor complex
66	c6d97B_	Alignment	not modelled	97.5	16	PDB header: oxidoreductase Chain: B; PDB Molecule: aldehyde dehydrogenase 12; PDBTitle: structure of aldehyde dehydrogenase 12 (aldh12) from zea mays
67	c4knaA_	Alignment	not modelled	97.5	21	PDB header: oxidoreductase Chain: A; PDB Molecule: n-succinylglutamate 5-semialdehyde dehydrogenase; PDBTitle: crystal structure of an n-succinylglutamate 5-semialdehyde2 dehydrogenase from burkholderia thailandensis
68	c4ohtB_	Alignment	not modelled	97.5	13	PDB header: oxidoreductase Chain: B; PDB Molecule: succinate-semialdehyde dehydrogenase; PDBTitle: crystal structure of succinic semialdehyde dehydrogenase from2 streptococcus pyogenes in complex with nadp+ as the cofactor
69	c4h73E_	Alignment	not modelled	97.5	14	PDB header: oxidoreductase Chain: E; PDB Molecule: aldehyde dehydrogenase; PDBTitle: thermostable aldehyde dehydrogenase from pyrobaculum sp. complexed2 with nadp+
70	c4c3sA_	Alignment	not modelled	97.4	18	PDB header: oxidoreductase Chain: A; PDB Molecule: aldehyde dehydrogenase; PDBTitle: structure of a propionaldehyde dehydrogenase from the clostridium2 phytofermentans fucose utilisation bacterial microcompartment
71	c3rh9A_	Alignment	not modelled	97.4	18	PDB header: oxidoreductase Chain: A; PDB Molecule: succinate-semialdehyde dehydrogenase (nad(p)(+)); PDBTitle: the crystal structure of oxidoreductase from marinobacter aquaeolei
72	c3my7A_	Alignment	not modelled	97.4	17	PDB header: oxidoreductase Chain: A; PDB Molecule: alcohol dehydrogenase/acetalddehyde dehydrogenase; PDBTitle: the crystal structure of the acdh domain of an alcohol dehydrogenase2 from vibrio parahaemolyticus to 2.25a
73	c6dbbA_	Alignment	not modelled	97.3	19	PDB header: oxidoreductase Chain: A; PDB Molecule: putative aldehyde dehydrogenase family protein; PDBTitle: crystal structure of a putative aldehyde dehydrogenase family protein2 burkholderia cenocepacia j2315 in complex with partially reduced nadh
74	d1ez0a_	Alignment	not modelled	97.3	16	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
						PDB header: oxidoreductase

75	c3ed6B	Alignment	not modelled	97.3	16	Chain: B; PDB Molecule: betaine aldehyde dehydrogenase; PDBTitle: 1.7 angstrom resolution crystal structure of betaine aldehyde2 dehydrogenase (betb) from staphylococcus aureus
76	c2o2qA	Alignment	not modelled	97.3	17	PDB header: oxidoreductase Chain: A; PDB Molecule: formyltetrahydrofolate dehydrogenase; PDBTitle: crystal structure of the c-terminal domain of rat2 10'formyltetrahydrofolate dehydrogenase in complex with nadp
77	c2hg2A	Alignment	not modelled	97.3	13	PDB header: oxidoreductase Chain: A; PDB Molecule: aldehyde dehydrogenase a; PDBTitle: structure of lactaldehyde dehydrogenase
78	d1bi9a	Alignment	not modelled	97.2	16	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
79	d1uzba	Alignment	not modelled	97.1	15	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
80	c4e4gF	Alignment	not modelled	97.0	19	PDB header: oxidoreductase Chain: F; PDB Molecule: methylmalonate-semialdehyde dehydrogenase; PDBTitle: crystal structure of putative methylmalonate-semialdehyde2 dehydrogenase from sinorhizobium meliloti 1021
81	c2ve5H	Alignment	not modelled	97.0	17	PDB header: oxidoreductase Chain: H; PDB Molecule: betaine aldehyde dehydrogenase; PDBTitle: crystallographic structure of betaine aldehyde2 dehydrogenase from pseudomonas aeruginosa
82	c3qanB	Alignment	not modelled	97.0	16	PDB header: oxidoreductase Chain: B; PDB Molecule: 1-pyrroline-5-carboxylate dehydrogenase 1; PDBTitle: crystal structure of 1-pyrroline-5-carboxylate dehydrogenase from2 bacillus halodurans
83	c2h5gA	Alignment	not modelled	96.8	13	PDB header: oxidoreductase Chain: A; PDB Molecule: delta 1-pyrroline-5-carboxylate synthetase; PDBTitle: crystal structure of human pyrroline-5-carboxylate synthetase
84	c3ju8B	Alignment	not modelled	96.7	18	PDB header: oxidoreductase Chain: B; PDB Molecule: succinylglutamic semialdehyde dehydrogenase; PDBTitle: crystal structure of succinylglutamic semialdehyde dehydrogenase from2 pseudomonas aeruginosa.
85	c5ujuA	Alignment	not modelled	96.7	21	PDB header: oxidoreductase Chain: A; PDB Molecule: nad-dependent aldehyde dehydrogenase; PDBTitle: crystal structure of nad-dependent aldehyde dehydrogenase from2 burkholderia multivorans
86	c3i44A	Alignment	not modelled	96.5	20	PDB header: oxidoreductase Chain: A; PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of aldehyde dehydrogenase from bartonella2 henselae at 2.0a resolution
87	c3b4wA	Alignment	not modelled	96.4	19	PDB header: oxidoreductase Chain: A; PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of mycobacterium tuberculosis aldehyde dehydrogenase2 complexed with nad+
88	c3hazA	Alignment	not modelled	96.4	19	PDB header: oxidoreductase Chain: A; PDB Molecule: proline dehydrogenase; PDBTitle: crystal structure of bifunctional proline utilization a2 (puta) protein
89	c4f9iA	Alignment	not modelled	96.2	14	PDB header: oxidoreductase Chain: A; PDB Molecule: proline dehydrogenase/delta-1-pyrroline-5-carboxylate PDBTitle: crystal structure of proline utilization a (puta) from geobacter2 sulfurreducens pca
90	c3r64A	Alignment	not modelled	95.5	19	PDB header: oxidoreductase Chain: A; PDB Molecule: nad dependent benzaldehyde dehydrogenase; PDBTitle: crystal structure of a nad-dependent benzaldehyde dehydrogenase from2 corynebacterium glutamicum
91	c4ghkB	Alignment	not modelled	95.3	16	PDB header: oxidoreductase Chain: B; PDB Molecule: gamma-glutamyl phosphate reductase; PDBTitle: x-ray crystal structure of gamma-glutamyl phosphate reductase from2 burkholderia thailandensis
92	c1t90B	Alignment	not modelled	95.2	16	PDB header: oxidoreductase Chain: B; PDB Molecule: probable methylmalonate-semialdehyde dehydrogenase; PDBTitle: crystal structure of methylmalonate semialdehyde dehydrogenase from2 bacillus subtilis
93	c5ur2C	Alignment	not modelled	94.9	17	PDB header: oxidoreductase Chain: C; PDB Molecule: bifunctional protein puta; PDBTitle: crystal structure of proline utilization a (puta) from bdellovibrio2 bacteriovorus inactivated by n-propargylglycine
94	c5j72B	Alignment	not modelled	94.4	16	PDB header: hydrolase Chain: B; PDB Molecule: putative n-acetylmuramoyl-l-alanine amidase, autolysin cwp6; PDBTitle: cwp6 from clostridium difficile
95	c4dngB	Alignment	not modelled	92.2	13	PDB header: oxidoreductase Chain: B; PDB Molecule: uncharacterized aldehyde dehydrogenase aldy; PDBTitle: crystal structure of putative aldehyde dehydrogenase from bacillus2 subtilis subsp. subtilis str. 168
96	c4idmA	Alignment	not modelled	91.5	15	PDB header: oxidoreductase Chain: A; PDB Molecule: delta-1-pyrroline-5-carboxylate dehydrogenase; PDBTitle: crystal structure of the delta-pyrroline-5-carboxylate dehydrogenase2 from mycobacterium tuberculosis
97	c2vroB	Alignment	not modelled	89.9	16	PDB header: oxidoreductase Chain: B; PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of aldehyde dehydrogenase from2 burkholderia xenovorans lb400
98	c3v9iD	Alignment	not modelled	74.9	16	PDB header: oxidoreductase Chain: D; PDB Molecule: delta-1-pyrroline-5-carboxylate dehydrogenase; PDBTitle: crystal structure of human 1-pyrroline-5-carboxylate

						dehydrogenase2 mutant s352l
99	c6ioxB_	Alignment	not modelled	65.1	23	PDB header: transferase Chain: B: PDB Molecule: phosphotransacetylase; PDBTitle: crystal structure of porphyromonas gingivalis phosphotransacetylase in2 complex with acetyl-coa
100	c4oe4A_	Alignment	not modelled	60.0	15	PDB header: oxidoreductase Chain: A: PDB Molecule: delta-1-pyrroline-5-carboxylate dehydrogenase, PDBTitle: crystal structure of yeast ald4a1 complexed with nad+
101	d1jcea1	Alignment	not modelled	58.7	20	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
102	c4issA_	Alignment	not modelled	56.8	14	PDB header: hydrolase Chain: A: PDB Molecule: allophanate hydrolase; PDBTitle: semet-substituted kluyveromyces lactis allophanate hydrolase
103	c5j6qA_	Alignment	not modelled	54.5	22	PDB header: cell adhesion Chain: A: PDB Molecule: cell wall binding protein cwp8; PDBTitle: cwp8 from clostridium difficile
104	c2ax3A_	Alignment	not modelled	52.6	15	PDB header: transferase Chain: A: PDB Molecule: hypothetical protein tm0922; PDBTitle: crystal structure of a putative carbohydrate kinase (tm0922) from2 thermotoga maritima msb8 at 2.25 a resolution
105	c6diiH_	Alignment	not modelled	51.5	23	PDB header: hydrolase Chain: H: PDB Molecule: fatty acid amide hydrolase; PDBTitle: structure of arabidopsis fatty acid amide hydrolase in complex with2 methyl linolenyl fluorophosphonate
106	c4cp8C_	Alignment	not modelled	50.7	16	PDB header: hydrolase Chain: C: PDB Molecule: allophanate hydrolase; PDBTitle: structure of the amidase domain of allophanate hydrolase2 from pseudomonas sp strain adp
107	d2e8aa1	Alignment	not modelled	46.6	22	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
108	d1bupa1	Alignment	not modelled	45.5	24	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
109	c6mvtA_	Alignment	not modelled	41.0	16	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde dehydrogenase; PDBTitle: structure of a bacterial ald16 complexed with nadh
110	c1e1cA_	Alignment	not modelled	40.0	28	PDB header: isomerase Chain: A: PDB Molecule: methylmalonyl-coa mutase alpha chain; PDBTitle: methylmalonyl-coa mutase h244a mutant
111	c5fo3B_	Alignment	not modelled	38.6	9	PDB header: cell cycle Chain: B: PDB Molecule: cell division protein zapc; PDBTitle: zapc cell division regulator from e. coli
112	c4om8B_	Alignment	not modelled	38.1	12	PDB header: oxidoreductase Chain: B: PDB Molecule: 3-hydroxybutyryl-coa dehydrogenase; PDBTitle: crystal structure of 5-formly-3-hydroxy-2-methylpyridine 4-carboxylic2 acid (fhmpc) 5-dehydrogenase, an nad+ dependent dismutase.
113	d2af4c1	Alignment	not modelled	36.9	21	Fold: Isocitrate/Isopropylmalate dehydrogenase-like Superfamily: Isocitrate/Isopropylmalate dehydrogenase-like Family: Phosphotransacetylase
114	c5b04G_	Alignment	not modelled	36.2	13	PDB header: translation Chain: G: PDB Molecule: probable translation initiation factor eif-2b subunit PDBTitle: crystal structure of the eukaryotic translation initiation factor 2b2 from schizosaccharomyces pombe
115	c4gysA_	Alignment	not modelled	34.1	17	PDB header: hydrolase Chain: A: PDB Molecule: allophanate hydrolase; PDBTitle: granulibacter bethesdensis allophanate hydrolase co-crystallized with2 malonate
116	c4uaqA_	Alignment	not modelled	31.5	25	PDB header: protein transport Chain: A: PDB Molecule: protein translocase subunit seca 2; PDBTitle: crystal structure of the accessory translocation atpase, seca2, from2 mycobacterium tuberculosis
117	d1dkgd1	Alignment	not modelled	31.0	25	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Actin/HSP70
118	c5ux5C_	Alignment	not modelled	30.3	20	PDB header: oxidoreductase/transferase Chain: C: PDB Molecule: bifunctional protein proline utilization a (puta); PDBTitle: structure of proline utilization a (puta) from corynebacterium2 freiburgense
119	c6fnuA_	Alignment	not modelled	29.8	12	PDB header: oxidoreductase Chain: A: PDB Molecule: methylenetetrahydrofolate reductase 1; PDBTitle: structure of s. cerevisiae methylenetetrahydrofolate reductase 1,2 catalytic domain
120	c5dboA_	Alignment	not modelled	29.1	13	PDB header: translation Chain: A: PDB Molecule: translation initiation factor eif-2b-like protein; PDBTitle: crystal structure of the tetrameric eif2b-beta2-delta2 complex from c.2 thermophilum