


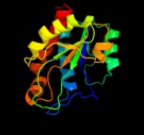



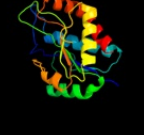
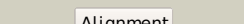

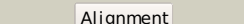
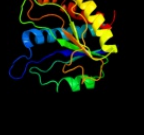
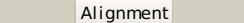

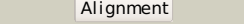
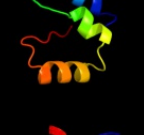
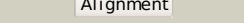
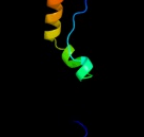
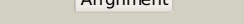

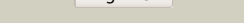

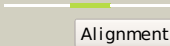
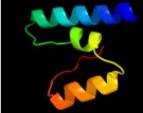
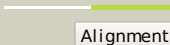

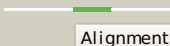

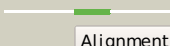

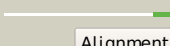

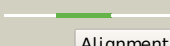
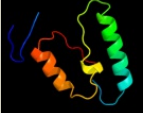


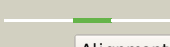





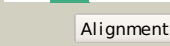
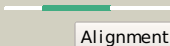
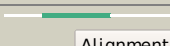


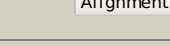


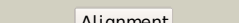
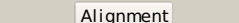


#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ne8A_	 Alignment		100.0	38	PDB header: hydrolase Chain: A: PDB Molecule: n-acetylmuramoyl-L-alanine amidase; PDBTitle: the crystal structure of a domain from n-acetylmuramoyl-L-alanine2 amidase of bartonella henselae str. houston-1
2	dljwqa_	 Alignment		100.0	37	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: N-acetylmuramoyl-L-alanine amidase-like
3	c1xovA_	 Alignment		100.0	24	PDB header: hydrolase Chain: A: PDB Molecule: ply protein; PDBTitle: the crystal structure of the listeria monocytogenes bacteriophage psa2 endolysin plypsa
4	c3czxA_	 Alignment		100.0	25	PDB header: hydrolase Chain: A: PDB Molecule: putative n-acetylmuramoyl-L-alanine amidase; PDBTitle: the crystal structure of the putative n-acetylmuramoyl-L-2 alanine amidase from neisseria meningitidis
5	dlxova2	 Alignment		100.0	24	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: N-acetylmuramoyl-L-alanine amidase-like
6	c3qayC_	 Alignment		100.0	23	PDB header: lyase Chain: C: PDB Molecule: endolysin; PDBTitle: catalytic domain of cd27I endolysin targeting clostridia difficile
7	c2qvpC_	 Alignment		86.8	19	PDB header: hydrolase Chain: C: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative metalloprotease (sama_0725) from2 shewanella amazonensis sb2b at 2.00 a resolution
8	dlnyra1	 Alignment		77.7	10	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
9	c2gfaC_	 Alignment		72.2	25	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: upf0204 protein ph0006; PDBTitle: structure of protein of unknown function ph0006 from pyrococcus2 horikoshii
10	dlyqea1	 Alignment		64.1	21	Fold: Phosphorylase/hydrolase-like Superfamily: AF0625-like Family: AF0625-like
11	c2fuvB_	 Alignment		62.7	24	PDB header: isomerase Chain: B: PDB Molecule: phosphoglucomutase; PDBTitle: phosphoglucomutase from salmonella typhimurium.

12	dlnj1a1	 Alignment		61.3	22	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
13	c3l2nA	 Alignment		60.8	16	PDB header: hydrolase Chain: A: PDB Molecule: peptidase m14, carboxypeptidase a; PDBTitle: crystal structure of putative carboxypeptidase a (yp_562911.1) from2 shewanella denitrificans os-217 at 2.39 a resolution
14	d1wu7a1	 Alignment		59.6	20	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
15	d2g4ca1	 Alignment		59.5	9	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
16	d2gfga1	 Alignment		58.9	19	Fold: Phosphorylase/hydrolase-like Superfamily: AF0625-like Family: AF0625-like
17	c1nj2A	 Alignment		57.2	22	PDB header: ligase Chain: A: PDB Molecule: proline-trna synthetase; PDBTitle: crystal structure of prolyl-trna synthetase from methanothermobacter2 thermotrophicus
18	d1qf6a1	 Alignment		56.9	8	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
19	d1qe0a1	 Alignment		50.7	22	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
20	c2vefB	 Alignment		50.1	35	PDB header: transferase Chain: B: PDB Molecule: dihydropteroate synthase; PDBTitle: dihydropteroate synthase from streptococcus pneumoniae
21	c3bghB	 Alignment	not modelled	49.6	16	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative neuraminylactose-binding hemagglutinin homolog; PDBTitle: crystal structure of putative neuraminylactose-binding hemagglutinin2 structure from helicobacter pylori
22	d1nj8a1	 Alignment	not modelled	48.3	16	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
23	c1b74A	 Alignment	not modelled	47.3	23	PDB header: isomerase Chain: A: PDB Molecule: glutamate racemase; PDBTitle: glutamate racemase from aquifex pyrophilus
24	c1u83A	 Alignment	not modelled	45.6	16	PDB header: lyase Chain: A: PDB Molecule: phosphosulfolactate synthase; PDBTitle: psl synthase from bacillus subtilis
25	d1u83a	 Alignment	not modelled	45.6	16	Fold: TIM beta/alpha-barrel Superfamily: (2r)-phospho-3-sulfolactate synthase ComA Family: (2r)-phospho-3-sulfolactate synthase ComA
26	c1y80A	 Alignment	not modelled	44.9	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted cobalamin binding protein; PDBTitle: structure of a corrinoid (factor iim)-binding protein from2 moorella thermoacetica
27	c2jfoB	 Alignment	not modelled	43.6	21	PDB header: isomerase Chain: B: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of enterococcus faecalis glutamate2 racemase in complex with d- and l-glutamate
28	c2dlnA	 Alignment	not modelled	43.4	26	PDB header: ligase(peptidoglycan synthesis) Chain: A: PDB Molecule: d-alanine--d-alanine ligase; PDBTitle: vancomycin resistance: structure of d-alanine:d-alanine2 ligase at 2.3 angstroms resolution

29	c3outC_	 Alignment	not modelled	43.4	24	PDB header: isomerase Chain: C: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of glutamate racemase from francisella tularensis2 subsp. tularensis schu s4 in complex with d-glutamate.
30	d1g5ha1	 Alignment	not modelled	43.3	10	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
31	c2i41C_	 Alignment	not modelled	43.1	17	PDB header: ligase Chain: C: PDB Molecule: proline-trna ligase; PDBTitle: rhodopseudomonas palustris prolyl-trna synthetase
32	d1b74a1	 Alignment	not modelled	42.7	23	Fold: ATC-like Superfamily: Aspartate/glutamate racemase Family: Aspartate/glutamate racemase
33	c3i3wB_	 Alignment	not modelled	42.1	28	PDB header: isomerase Chain: B: PDB Molecule: phosphoglucosamine mutase; PDBTitle: structure of a phosphoglucosamine mutase from francisella tularensis
34	d1ccwa_	 Alignment	not modelled	41.8	17	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
35	c3na6A_	 Alignment	not modelled	41.7	12	PDB header: hydrolase Chain: A: PDB Molecule: succinylglutamate desuccinylase/aspartoacylase; PDBTitle: crystal structure of a succinylglutamate desuccinylase (tm1040_2694)2 from silicibacter sp. tm1040 at 2.00 a resolution
36	c2yxba_	 Alignment	not modelled	40.3	25	PDB header: isomerase Chain: A: PDB Molecule: coenzyme b12-dependent mutase; PDBTitle: crystal structure of the methylmalonyl-coa mutase alpha-subunit from2 aeropyrum pernix
37	d3bula2	 Alignment	not modelled	39.7	18	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
38	c2jfqA_	 Alignment	not modelled	39.7	24	PDB header: isomerase Chain: A: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of staphylococcus aureus glutamate2 racemase in complex with d-glutamate
39	c3fs2A_	 Alignment	not modelled	36.9	32	PDB header: transferase Chain: A: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate2 aldolase from bruciella melitensis at 1.85a resolution
40	c3nh8A_	 Alignment	not modelled	36.1	12	PDB header: hydrolase Chain: A: PDB Molecule: aspartoacylase-2; PDBTitle: crystal structure of murine aminoacylase 3 in complex with n-acetyl-s-2 1,2-dichlorovinyl-l-cysteine
41	d2naca2	 Alignment	not modelled	35.7	25	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: Formate/glycerate dehydrogenases, substrate-binding domain
42	d1fmfa_	 Alignment	not modelled	34.9	16	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
43	c2jfbB_	 Alignment	not modelled	34.5	21	PDB header: isomerase Chain: B: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of helicobacter pylori glutamate racemase2 in complex with d-glutamate and an inhibitor
44	c3netB_	 Alignment	not modelled	34.5	22	PDB header: ligase Chain: B: PDB Molecule: histidyl-trna synthetase; PDBTitle: crystal structure of histidyl-trna synthetase from nostoc sp. pcc 7120
45	c1fyfB_	 Alignment	not modelled	34.0	9	PDB header: ligase Chain: B: PDB Molecule: threonyl-trna synthetase; PDBTitle: crystal structure of a truncated form of threonyl-trna2 synthetase complexed with a seryl adenylate analog
46	c2gzmbB_	 Alignment	not modelled	33.8	22	PDB header: isomerase Chain: B: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of the glutamate racemase from bacillus2 anthracis
47	c3hriF_	 Alignment	not modelled	33.2	18	PDB header: ligase Chain: F: PDB Molecule: histidyl-trna synthetase; PDBTitle: histidyl-trna synthetase (apo) from trypanosoma brucei
48	c1wwpA_	 Alignment	not modelled	32.8	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ttha0636; PDBTitle: crystal structure of ttk003001694 from thermus thermophilus2 hb8
49	c2e85B_	 Alignment	not modelled	32.7	28	PDB header: hydrolase Chain: B: PDB Molecule: hydrogenase 3 maturation protease; PDBTitle: crystal structure of the hydrogenase 3 maturation protease
50	c2j3mA_	 Alignment	not modelled	32.1	10	PDB header: ligase Chain: A: PDB Molecule: prolyl-trna synthetase; PDBTitle: prolyl-trna synthetase from enterococcus faecalis complexed2 with atp, manganese and prolinol
51	c2vavL_	 Alignment	not modelled	31.1	13	PDB header: transferase Chain: L: PDB Molecule: acetyl-coa--deacetylcephalosporin c PDBTitle: crystal structure of deacetylcephalosporin c2 acetyltransferase (dac-soak)
52	c1atiA_	 Alignment	not modelled	30.0	13	PDB header: protein biosynthesis Chain: A: PDB Molecule: glycyl-trna synthetase; PDBTitle: crystal structure of glycyl-trna synthetase from thermus thermophilus
53	c1g5hA_	 Alignment	not modelled	29.0	10	PDB header: dna binding protein Chain: A: PDB Molecule: mitochondrial dna polymerase accessory subunit; PDBTitle: crystal structure of the accessory subunit of murine mitochondrial2 polymerase gamma
		 Alignment				PDB header: ligase

54	c1wu7A_	Alignment	not modelled	28.9	20	Chain: A: PDB Molecule: histidyl-trna synthetase; PDBTitle: crystal structure of histidyl-trna synthetase from2 thermoplasma acidophilum
55	c3l80A_	Alignment	not modelled	28.5	14	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein smu.1393c; PDBTitle: crystal structure of smu.1393c from streptococcus mutans ua159
56	c3k2kA_	Alignment	not modelled	28.2	17	PDB header: hydrolase Chain: A: PDB Molecule: putative carboxypeptidase; PDBTitle: crystal structure of putative carboxypeptidase (yp_103406.1) from2 burkholderia mallei atcc 23344 at 2.49 a resolution
57	c2hkoA_	Alignment	not modelled	27.6	26	PDB header: oxidoreductase Chain: A: PDB Molecule: lysine-specific histone demethylase 1; PDBTitle: crystal structure of lsd1
58	c2ronA_	Alignment	not modelled	26.7	36	PDB header: hydrolase Chain: A: PDB Molecule: surfactin synthetase thioesterase subunit; PDBTitle: the external thioesterase of the surfactin-synthetase
59	dlad1a_	Alignment	not modelled	26.6	63	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
60	c1ggmB_	Alignment	not modelled	26.3	13	PDB header: ligase Chain: B: PDB Molecule: protein (glycyl-trna synthetase); PDBTitle: glycyl-trna synthetase from thermus thermophilus complexed with2 glycyl-adenylate
61	c2an1D_	Alignment	not modelled	26.2	16	PDB header: transferase Chain: D: PDB Molecule: putative kinase; PDBTitle: structural genomics, the crystal structure of a putative kinase from2 salmonella typhimurim lt2
62	c3hfrA_	Alignment	not modelled	26.1	23	PDB header: isomerase Chain: A: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of glutamate racemase from listeria monocytogenes
63	c3rfqC_	Alignment	not modelled	25.4	18	PDB header: biosynthetic protein Chain: C: PDB Molecule: pterin-4-alpha-carbinolamine dehydratase moab2; PDBTitle: crystal structure of pterin-4-alpha-carbinolamine dehydratase moab22 from mycobacterium marinum
64	c3iliA_	Alignment	not modelled	25.3	18	PDB header: transferase Chain: A: PDB Molecule: homoserine o-acetyltransferase; PDBTitle: x-ray crystal structure of homoserine o-acetyltransferase from2 bacillus anthracis
65	c3s29C_	Alignment	not modelled	25.1	29	PDB header: transferase Chain: C: PDB Molecule: sucrose synthase 1; PDBTitle: the crystal structure of sucrose synthase-1 from arabidopsis thaliana2 and its functional implications.
66	dlkfia2	Alignment	not modelled	23.9	29	Fold: Phosphoglucomutase, first 3 domains Superfamily: Phosphoglucomutase, first 3 domains Family: Phosphoglucomutase, first 3 domains
67	dliowa1	Alignment	not modelled	23.3	30	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: D-Alanine ligase N-terminal domain
68	c3a32A_	Alignment	not modelled	22.6	15	PDB header: ligase Chain: A: PDB Molecule: probable threonyl-trna synthetase 1; PDBTitle: crystal structure of putative threonyl-trna synthetase2 thrrs-1 from aeropyrum pernix
69	c2ohoA_	Alignment	not modelled	22.6	18	PDB header: isomerase Chain: A: PDB Molecule: glutamate racemase; PDBTitle: structural basis for glutamate racemase inhibitor
70	c3ezxA_	Alignment	not modelled	22.0	19	PDB header: transferase Chain: A: PDB Molecule: monomethylamine corrinoid protein 1; PDBTitle: structure of methanosarcina barkeri monomethylamine2 corrinoid protein
71	dlztca1	Alignment	not modelled	21.7	25	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: TM0894-like
72	c1nyqA_	Alignment	not modelled	21.2	11	PDB header: ligase Chain: A: PDB Molecule: threonyl-trna synthetase 1; PDBTitle: structure of staphylococcus aureus threonyl-trna synthetase2 complexed with an analogue of threonyl adenylate
73	c2y5sA_	Alignment	not modelled	21.1	50	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: crystal structure of burkholderia cenocepacia dihydropteroate2 synthase complexed with 7,8-dihydropteroate.
74	c3ibtA_	Alignment	not modelled	20.9	20	PDB header: oxidoreductase Chain: A: PDB Molecule: 1h-3-hydroxy-4-oxoquinoline 2,4-dioxygenase; PDBTitle: structure of 1h-3-hydroxy-4-oxoquinoline 2,4-dioxygenase (qdo)
75	c2dwuA_	Alignment	not modelled	19.8	22	PDB header: isomerase Chain: A: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of glutamate racemase isoform race1 from bacillus2 anthracis
76	c2vf7B_	Alignment	not modelled	19.8	29	PDB header: dna-binding protein Chain: B: PDB Molecule: excinuclease abc, subunit a.; PDBTitle: crystal structure of uvra2 from deinococcus radiodurans
77	c2dzaA_	Alignment	not modelled	19.5	88	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: crystal structure of dihydropteroate synthase from thermus2 thermophilus hb8 in complex with 4-aminobenzoate
78	dlatia1	Alignment	not modelled	18.9	13	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
79	c1qe0B_	Alignment	not modelled	18.9	22	PDB header: ligase Chain: B: PDB Molecule: histidyl-trna synthetase;

					PDBTitle: crystal structure of apo s. aureus histidyl-trna synthetase
80	c1nj8C_	Alignment	not modelled	18.3	16 PDB header: ligase Chain: C: PDB Molecule: proline-trna synthetase; PDBTitle: crystal structure of prolyl-trna synthetase from2 methanocaldococcus janaschii
81	c2dkdA_	Alignment	not modelled	18.3	17 PDB header: isomerase Chain: A: PDB Molecule: phosphoacetylglucosamine mutase; PDBTitle: crystal structure of n-acetylglucosamine-phosphate mutase,2 a member of the alpha-d-phosphohexomutase superfamily, in3 the product complex
82	c1qf6A_	Alignment	not modelled	18.3	10 PDB header: ligase/rna Chain: A: PDB Molecule: threonyl-trna synthetase; PDBTitle: structure of e. coli threonyl-trna synthetase complexed with its2 cognate trna
83	c2jfnA_	Alignment	not modelled	17.7	24 PDB header: isomerase Chain: A: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of escherichia coli glutamate racemase2 in complex with l-glutamate and activator udp-murnac-ala
84	d1rz3a_	Alignment	not modelled	17.6	26 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Phosphoribulokinase/pantothenate kinase
85	d1mdah_	Alignment	not modelled	17.5	16 Fold: 7-bladed beta-propeller Superfamily: YVTN repeat-like/Quinoprotein amine dehydrogenase Family: Methylamine dehydrogenase, H-chain
86	c2vp8A_	Alignment	not modelled	17.3	50 PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase 2; PDBTitle: structure of mycobacterium tuberculosis rv1207
87	d2vata1	Alignment	not modelled	17.1	16 Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: O-acetyltransferase
88	d1eyea_	Alignment	not modelled	17.0	75 Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
89	d2grea2	Alignment	not modelled	16.8	9 Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
90	c2i80B_	Alignment	not modelled	16.5	21 PDB header: ligase Chain: B: PDB Molecule: d-alanine-d-alanine ligase; PDBTitle: allosteric inhibition of staphylococcus aureus d-alanine:d-alanine2 ligase revealed by crystallographic studies
91	d1c4xa_	Alignment	not modelled	16.5	19 Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Carbon-carbon bond hydrolase
92	c1tx2A_	Alignment	not modelled	16.3	63 PDB header: transferase Chain: A: PDB Molecule: dhps, dihydropteroate synthase; PDBTitle: dihydropteroate synthetase, with bound inhibitor manic, from bacillus2 anthracis
93	d1tx2a_	Alignment	not modelled	16.3	63 Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
94	d1vixa1	Alignment	not modelled	16.3	9 Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
95	c2i9iA_	Alignment	not modelled	16.3	10 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of helicobacter pylori protein hp0492
96	d2i9ia1	Alignment	not modelled	16.3	10 Fold: Anticodon-binding domain-like Superfamily: XCC0632-like Family: NLBH-like
97	c1k8wA_	Alignment	not modelled	16.2	55 PDB header: lyase/rna Chain: A: PDB Molecule: trna pseudouridine synthase b; PDBTitle: crystal structure of the e. coli pseudouridine synthase2 trub bound to a t-stem-loop rna
98	c2i2xO_	Alignment	not modelled	15.9	16 PDB header: transferase Chain: O: PDB Molecule: methyltransferase 1; PDBTitle: crystal structure of methanol:cobalamin methyltransferase complex2 mtabc from methanosarcina barkeri
99	c2pmfA_	Alignment	not modelled	15.8	18 PDB header: ligase Chain: A: PDB Molecule: glycyl-trna synthetase; PDBTitle: the crystal structure of a human glycyl-trna synthetase mutant