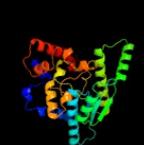
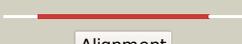


Phyre2

Email	arsen.orazbek@nu.edu.kz
Description	Student_
Date	Sat Oct 16 13:04:15 BST 2021
Unique Job ID	8d48c9655093e29c

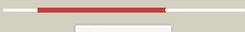
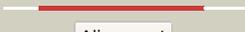
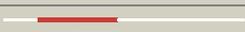
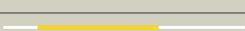
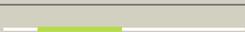
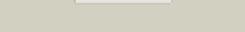
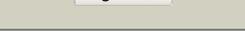
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1kqpa_	 Alignment		100.0	46	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
2	c4xfda_	 Alignment		100.0	100	PDB header: ligase Chain: A: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of a nh(3)-dependent nad(+) synthetase from2 pseudomonas aeruginosa PDB Entry: PDBe RCSB PDBj
3	c3dpiA_	 Alignment		100.0	54	PDB header: ligase Chain: A: PDB Molecule: nad+ synthetase; PDBTitle: crystal structure of nad+ synthetase from burkholderia pseudomallei PDB Entry: PDBe RCSB PDBj
4	c4q16C_	 Alignment		100.0	50	PDB header: ligase Chain: C: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: structure of nad+ synthetase from deinococcus radiodurans PDB Entry: PDBe RCSB PDBj
5	d1wxia1	 Alignment		100.0	48	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
6	c5huJB_	 Alignment		100.0	53	PDB header: transferase Chain: B: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of nade from streptococcus pyogenes PDB Entry: PDBe RCSB PDBj
7	c3q4gA_	 Alignment		100.0	55	PDB header: ligase Chain: A: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: structure of nad synthetase from vibrio cholerae PDB Entry: PDBe RCSB PDBj
8	c6ofbA_	 Alignment		100.0	28	PDB header: ligase Chain: A: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: crystal structure of human glutamine-dependent nad+ synthetase2 complexed with naad+, amp, pyrophosphate, and mg2+ PDB Entry: PDBe RCSB PDBj
9	c5khaA_	 Alignment		100.0	23	PDB header: ligase Chain: A: PDB Molecule: glutamine-dependent nad+ synthetase; PDBTitle: structure of glutamine-dependent nad+ synthetase from acinetobacter2 baumannii in complex with adenosine diphosphate (adp) PDB Entry: PDBe RCSB PDBj
10	c4f4hA_	 Alignment		100.0	23	PDB header: ligase Chain: A: PDB Molecule: glutamine dependent nad+ synthetase; PDBTitle: crystal structure of a glutamine dependent nad+ synthetase from2 burkholderia thailandensis PDB Entry: PDBe RCSB PDBj
11	c2e18B_	 Alignment		100.0	35	PDB header: ligase Chain: B: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of project ph0182 from pyrococcus horikoshii ot3 PDB Entry: PDBe RCSB PDBj

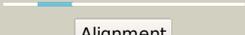
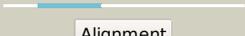
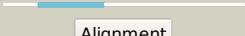
12	c3fiuD_			100.0	35	PDB header: ligase Chain: D: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: structure of nmN synthetase from francisella tularensis PDB Entry: PDBe RCSB PDBj
13	c3dlaD_			100.0	26	PDB header: ligase Chain: D: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: x-ray crystal structure of glutamine-dependent nad+ synthetase from2 mycobacterium tuberculosis bound to naad+ and don PDB Entry: PDBe RCSB PDBj
14	c3n05B_			100.0	22	PDB header: ligase Chain: B: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of nh3-dependent nad+ synthetase from streptomyces2 avermitilis PDB Entry: PDBe RCSB PDBj
15	c6kv3A_			100.0	46	PDB header: ligase Chain: A: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of nad+ synthetase from staphylococcus aureus PDB Entry: PDBe RCSB PDBj
16	c3ilvA_			100.0	21	PDB header: ligase Chain: A: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: crystal structure of a glutamine-dependent nad(+) synthetase from2 cytophaga hutchinsonii PDB Entry: PDBe RCSB PDBj
17	d1xnga1			100.0	31	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
18	c3p52B_			100.0	28	PDB header: ligase Chain: B: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: nh3-dependent nad synthetase from campylobacter jejuni subsp. jejuni2 nctc 11168 in complex with the nitrate ion PDB Entry: PDBe RCSB PDBj
19	c2vxoB_			100.0	20	PDB header: ligase Chain: B: PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: human gmp synthetase in complex with xmp PDB Entry: PDBe RCSB PDBj
20	c1gpmD_			100.0	20	PDB header: transferase (glutamine amidotransferase) Chain: D: PDB Molecule: gmp synthetase; PDBTitle: escherichia coli gmp synthetase complexed with amp and pyrophosphate PDB Entry: PDBe RCSB PDBj
21	c5tw7E_		not modelled	100.0	23	PDB header: ligase Chain: E: PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: crystal structure of a gmp synthase (glutamine-hydrolyzing) from2 neisseria gonorrhoeae PDB Entry: PDBe RCSB PDBj
22	c3uowB_		not modelled	100.0	18	PDB header: ligase Chain: B: PDB Molecule: gmp synthetase; PDBTitle: crystal structure of pf10_0123, a gmp synthetase from plasmodium2 falciparum PDB Entry: PDBe RCSB PDBj
23	c3tqiB_		not modelled	100.0	19	PDB header: ligase Chain: B: PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: structure of the gmp synthase (guaa) from coxiella burnetii PDB Entry: PDBe RCSB PDBj
24	c7sbcA_		not modelled	100.0	16	PDB header: transferase Chain: A: PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: crystal structure of a gmp synthase from acinetobacter baumannii2 ab5075-uw PDB Entry: PDBe RCSB PDBj
25	c2hmaA_		not modelled	100.0	24	PDB header: transferase Chain: A: PDB Molecule: probable trna (5-methylaminomethyl-2-thiouridylate)- PDBTitle: the crystal structure of trna (5-methylaminomethyl-2-thiouridylate)-2 methyltransferase trmu from streptococcus pneumoniae PDB Entry: PDBe RCSB PDBj
26	c2ywcC_		not modelled	100.0	21	PDB header: ligase Chain: C: PDB Molecule: gmp synthase [glutamine-hydrolyzing]; PDBTitle: crystal structure of gmp synthetase from thermus thermophilus in2 complex with xmp PDB Entry: PDBe RCSB PDBj

27	c2dpA_	Alignment	not modelled	100.0	23	PDB header: ligase Chain: A: PDB Molecule: gmp synthase [glutamine-hydrolyzing] subunit b; PDBTitle: crystal structure of the gmp synthase from pyrococcus horikoshii ot3 PDB Entry: PDBe RCSB PDBj
28	c2derA_	Alignment	not modelled	99.9	25	PDB header: transferase/rna Chain: A: PDB Molecule: trna-specific 2-thiouridylase mnma; PDBTitle: cocrystal structure of an rna sulfuration enzyme mnma and2 trna-glu in the initial trna binding state PDB Entry: PDBe RCSB PDBj
29	d1gpma1	Alignment	not modelled	99.9	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
30	c6jp9C_	Alignment	not modelled	99.9	22	PDB header: ligase Chain: C: PDB Molecule: gmp synthase [glutamine-hydrolyzing] subunit b; PDBTitle: crsytal structure of a xmp complexed atppase subunit of m. jannaschii2 gmp synthetase PDB Entry: PDBe RCSB PDBj
31	c5udwB_	Alignment	not modelled	99.9	24	PDB header: transferase Chain: B: PDB Molecule: lactate racemization operon protein lare; PDBTitle: lare, a sulfur transferase involved in synthesis of the cofactor for2 lactate racemase, in complex with nickel PDB Entry: PDBe RCSB PDBj
32	c4kr7A_	Alignment	not modelled	99.8	19	PDB header: transferase/rna Chain: A: PDB Molecule: probable trna sulfurtransferase; PDBTitle: crystal structure of a 4-thiouridine synthetase - rna complex with2 bound atp PDB Entry: PDBe RCSB PDBj
33	c2c5sA_	Alignment	not modelled	99.8	19	PDB header: rna binding protein Chain: A: PDB Molecule: probable thiamine biosynthesis protein thii; PDBTitle: crystal structure of bacillus anthracis thii, a trna-modifying enzyme2 containing the predicted rna-binding thump domain PDB Entry: PDBe RCSB PDBj
34	c5udtD_	Alignment	not modelled	99.8	23	PDB header: transferase Chain: D: PDB Molecule: lactate racemization operon protein lare; PDBTitle: lare, a sulfur transferase involved in synthesis of the cofactor for2 lactate racemase, in complex with amp PDB Entry: PDBe RCSB PDBj
35	d2c5sa1	Alignment	not modelled	99.8	19	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: ThiI-like PDB entry: PDBe RCSB PDBj
36	d1j20a1	Alignment	not modelled	99.7	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
37	d1wy5a1	Alignment	not modelled	99.7	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PP-loop ATPase PDB entry: PDBe RCSB PDBj
38	c3k32D_	Alignment	not modelled	99.7	15	PDB header: transferase Chain: D: PDB Molecule: uncharacterized protein mj0690; PDBTitle: the crystal structure of predicted subunit of trna methyltransferase2 from methanocaldococcus jannaschii dsm PDB Entry: PDBe RCSB PDBj
39	d1vl2a1	Alignment	not modelled	99.6	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
40	c3bl5E_	Alignment	not modelled	99.6	20	PDB header: hydrolase Chain: E: PDB Molecule: queuosine biosynthesis protein quec; PDBTitle: crystal structure of quec from bacillus subtilis: an enzyme2 involved in preq1 biosynthesis PDB Entry: PDBe RCSB PDBj
41	d1ni5a1	Alignment	not modelled	99.6	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PP-loop ATPase PDB entry: PDBe RCSB PDBj
42	c2e21A_	Alignment	not modelled	99.6	14	PDB header: ligase Chain: A: PDB Molecule: trna(ile)-lysine synthase; PDBTitle: crystal structure of tils in a complex with amppnp from aquifex2 aeolicus. PDB Entry: PDBe RCSB PDBj
43	d1k92a1	Alignment	not modelled	99.5	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
44	c6xngA_	Alignment	not modelled	99.5	14	PDB header: ligase Chain: A: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of argininosuccinate synthase from legionella2 pneumophila philadelphia 1 PDB Entry: PDBe RCSB PDBj
45	c5ghaC_	Alignment	not modelled	99.5	17	PDB header: transferase/transport protein Chain: C: PDB Molecule: sulfur transferase ttua; PDBTitle: sulfur transferase ttua in complex with sulfur carrier ttub PDB Entry: PDBe RCSB PDBj
46	c3vrhA_	Alignment	not modelled	99.5	15	PDB header: rna binding protein Chain: A: PDB Molecule: putative uncharacterized protein ph0300; PDBTitle: crystal structure of ph0300 PDB Entry: PDBe RCSB PDBj
47	d2pg3a1	Alignment	not modelled	99.5	19	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
48	c6scvA_	Alignment	not modelled	99.5	18	PDB header: rna binding protein Chain: A: PDB Molecule: [4fe-4s]-dependent u34-arnt thiolase; PDBTitle: u34-trna thiolase ncsa from methanococcus maripaludis with its [4fe-2 4s] cluster

						PDB Entry: PDBe RCSB PDBj PDB header: ligase Chain: A: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of human argininosuccinate synthase in complex with 2 aspartate and citrulline PDB Entry: PDBe RCSB PDBj
49	c2nz2A_	Alignment	not modelled	99.5	16	PDB header: ligase Chain: D: PDB Molecule: argininosuccinate synthetase; PDBTitle: crystal structure of thermus thermophilus hb8 argininosuccinate 2 synthetase in complex with atp PDB Entry: PDBe RCSB PDBj
50	c1kh2D_	Alignment	not modelled	99.5	16	PDB header: ligase Chain: A: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of e. coli argininosuccinate synthetase in complex 2 with aspartate and citrulline PDB Entry: PDBe RCSB PDBj
51	c1k97A_	Alignment	not modelled	99.5	16	PDB header: ligase Chain: B: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of argininosuccinate synthase from mycobacterium 2 thermoresistibile PDB Entry: PDBe RCSB PDBj
52	c4u7jB_	Alignment	not modelled	99.4	14	PDB header: ligase/rna Chain: B: PDB Molecule: trna(ile)-lysine synthase; PDBTitle: crystal structure of tils complexed with trna PDB Entry: PDBe RCSB PDBj
53	c3a2kB_	Alignment	not modelled	99.4	17	PDB header: ligase Chain: C: PDB Molecule: argininosuccinate synthase; PDBTitle: crystal structure of argininosuccinate synthase (tm1780) from 2 thermotoga maritima at 1.65 a resolution PDB Entry: PDBe RCSB PDBj
54	c1vl2C_	Alignment	not modelled	99.4	15	PDB header: cell cycle Chain: A: PDB Molecule: putative cell cycle protein mesj; PDBTitle: structure of the mesj pp-atpase from escherichia coli PDB Entry: PDBe RCSB PDBj
55	c1ni5A_	Alignment	not modelled	99.3	17	PDB header: ligase Chain: A: PDB Molecule: argininosuccinate synthase; PDBTitle: the crystal structure of argininosuccinate synthase from campylobacter 2 jejuni subsp. jejuni nctc 11168 PDB Entry: PDBe RCSB PDBj
56	c4nzpA_	Alignment	not modelled	99.2	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
57	dlq15a1	Alignment	not modelled	99.2	14	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PAPS reductase-like PDB entry: PDBe RCSB PDBj
58	dl1sura_	Alignment	not modelled	99.2	8	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: Thil-like PDB entry: PDBe RCSB PDBj
59	dlvbkA1	Alignment	not modelled	99.1	13	PDB header: oxidoreductase Chain: A: PDB Molecule: 3'-phosphoadenylylsulfate reductase; PDBTitle: crystal structure of phosphoadenylyl-sulfate (paps) reductase from 2 candida auris, phosphate complex PDB Entry: PDBe RCSB PDBj
60	c7rgeA_	Alignment	not modelled	99.1	9	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
61	dljgta1	Alignment	not modelled	99.1	17	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PAPS reductase-like PDB entry: PDBe RCSB PDBj
62	dlzuna1	Alignment	not modelled	99.0	15	PDB header: oxidoreductase Chain: B: PDB Molecule: phosphoadenosine phosphosulfate reductase; PDBTitle: 1.90 angstrom resolution crystal structure phosphoadenosine 2 phosphosulfate reductase (cysh) from vibrio vulnificus PDB Entry: PDBe RCSB PDBj
63	c6vpuB_	Alignment	not modelled	99.0	9	PDB header: transferase Chain: A: PDB Molecule: sulfate adenylyltransferase subunit 2; PDBTitle: crystal structure of a gtp-regulated atp sulfurylase 2 heterodimer from pseudomonas syringae PDB Entry: PDBe RCSB PDBj
64	c1zunA_	Alignment	not modelled	99.0	12	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
65	dlct9a1	Alignment	not modelled	98.9	14	PDB header: biosynthetic protein Chain: A: PDB Molecule: carA; PDBTitle: carbapenam synthetase PDB Entry: PDBe RCSB PDBj
66	c1q15A_	Alignment	not modelled	98.9	14	PDB header: oxidoreductase Chain: C: PDB Molecule: adenosine phosphosulfate reductase; PDBTitle: crystal structure of assimilatory adenosine 5'-2 phosphosulfate reductase with bound aps PDB Entry: PDBe RCSB PDBj
67	c2goyC_	Alignment	not modelled	98.9	13	PDB header: hydrolase Chain: B: PDB Molecule: beta-lactam synthetase; PDBTitle: beta-lactam synthetase apo enzyme PDB Entry: PDBe RCSB PDBj
68	c1m1zB_	Alignment	not modelled	98.9	16	PDB header: biosynthetic protein Chain: A: PDB Molecule: asparagine synthetase [glutamine-hydrolyzing]; PDBTitle: human asparagine synthetase (asns) in complex with 6-diazo-5-oxo-l-2 norleucine (don) at 1.85 a resolution PDB Entry: PDBe RCSB PDBj
69	c6gq3A_	Alignment	not modelled	98.9	17	PDB header: oxidoreductase Chain: A: PDB Molecule: phosphoadenosine phosphosulfate reductase; PDBTitle: paps reductase in a covalent complex with thioredoxin
70	c2o8vA_	Alignment	not modelled	98.8	8	

						c35a PDB Entry: PDBe RCSB PDBj
71	c1ct9D_	 Alignment	not modelled	98.8	13	PDB header: ligase Chain: D: PDB Molecule: asparagine synthetase b; PDBTitle: crystal structure of asparagine synthetase b from2 escherichia coli PDB Entry: PDBe RCSB PDBj
72	c7lhrA_	 Alignment	not modelled	98.8	13	PDB header: oxidoreductase Chain: A: PDB Molecule: phosphoadenosine phosphosulfate reductase; PDBTitle: crystal structure of adenosine-5'-phosphosulfate reductase from2 mycobacterium tuberculosis PDB Entry: PDBe RCSB PDBj
73	c4bwvB_	 Alignment	not modelled	98.5	8	PDB header: oxidoreductase Chain: B: PDB Molecule: phosphoadenosine-phosphosulphate reductase; PDBTitle: structure of adenosine 5-prime-phosphosulfate reductase apr-b from2 physcomitrella patens PDB Entry: PDBe RCSB PDBj
74	d1ru8a_	 Alignment	not modelled	98.5	17	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
75	c3g59A_	 Alignment	not modelled	98.4	13	PDB header: transferase Chain: A: PDB Molecule: fmn adenyllyltransferase; PDBTitle: crystal structure of candida glabrata fmn adenyllyltransferase in2 complex with atp PDB Entry: PDBe RCSB PDBj
76	c2wsiA_	 Alignment	not modelled	98.3	13	PDB header: transferase Chain: A: PDB Molecule: fad synthetase; PDBTitle: crystal structure of yeast fad synthetase (fad1) in complex2 with fad PDB Entry: PDBe RCSB PDBj
77	c2oq2B_	 Alignment	not modelled	98.3	11	PDB header: oxidoreductase Chain: B: PDB Molecule: phosphoadenosine phosphosulfate reductase; PDBTitle: crystal structure of yeast paps reductase with pap, a product complex PDB Entry: PDBe RCSB PDBj
78	c1vbka_	 Alignment	not modelled	98.0	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein ph1313; PDBTitle: crystal structure of ph1313 from pyrococcus horikoshii ot3 PDB Entry: PDBe RCSB PDBj
79	c5hyya_	 Alignment	not modelled	97.9	9	PDB header: hydrolase Chain: A: PDB Molecule: nta1p; PDBTitle: crystal structure of n-terminal amidase PDB Entry: PDBe RCSB PDBj
80	d2d13a1	 Alignment	not modelled	97.6	22	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: N-type ATP pyrophosphatases PDB entry: PDBe RCSB PDBj
81	c3c8uA_	 Alignment	not modelled	83.9	15	PDB header: transferase Chain: A: PDB Molecule: fructokinase; PDBTitle: crystal structure of putative fructose transport system kinase2 (yp_612366.1) from silicibacter sp. tm1040 at 1.95 a resolution PDB Entry: PDBe RCSB PDBj
82	d1rz3a_	 Alignment	not modelled	77.1	21	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Phosphoribulokinase/pantothenate kinase PDB entry: PDBe RCSB PDBj
83	d1sq5a_	 Alignment	not modelled	76.3	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Phosphoribulokinase/pantothenate kinase PDB entry: PDBe RCSB PDBj
84	c2gesA_	 Alignment	not modelled	71.5	14	PDB header: transferase Chain: A: PDB Molecule: pantothenate kinase; PDBTitle: pantothenate kinase from mycobacterium tuberculosis (mtpank) in2 complex with a coenzyme a derivative, form-i (rt) PDB Entry: PDBe RCSB PDBj
85	d1t5la1	 Alignment	not modelled	70.8	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain PDB entry: PDBe RCSB PDBj
86	c4oqqA_	 Alignment	not modelled	67.6	13	PDB header: transcription Chain: A: PDB Molecule: deoxyribonucleoside regulator; PDBTitle: structure of the effector-binding domain of deoxyribonucleoside2 regulator deor from bacillus subtilis PDB Entry: PDBe RCSB PDBj
87	c5b3fB_	 Alignment	not modelled	64.6	11	PDB header: transferase Chain: B: PDB Molecule: phosphoribulokinase/uridine kinase; PDBTitle: crystal structure of phosphoribulokinase from methanospirillum2 hungatei PDB Entry: PDBe RCSB PDBj
88	c2j0eA_	 Alignment	not modelled	62.4	15	PDB header: hydrolase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: three dimensional structure and catalytic mechanism of 6-2 phosphogluconolactonase from trypanosoma brucei PDB Entry: PDBe RCSB PDBj
89	d1npya1	 Alignment	not modelled	55.6	18	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain PDB entry: PDBe RCSB PDBj
90	c6nbgD_	 Alignment	not modelled	49.0	10	PDB header: unknown function Chain: D: PDB Molecule: glucosamine-6-phosphate deaminase; PDBTitle: 2.05 angstrom resolution crystal structure of hypothetical protein2 kp1_5497 from klebsiella pneumoniae. PDB Entry: PDBe RCSB PDBj
91	c6vyeB_	 Alignment	not modelled	43.6	14	PDB header: hydrolase Chain: B: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: 6-phosphogluconolactonase from trypanosoma cruzi PDB Entry: PDBe RCSB PDBj

92	c6gveG	Alignment	not modelled	41.5	11	PDB header: photosynthesis Chain: G: PDB Molecule: phosphoribulokinase; PDBTitle: gapdh-cp12-prk complex PDB Entry: PDBe RCSB PDBj
93	c3vewA	Alignment	not modelled	41.2	28	PDB header: transferase Chain: A: PDB Molecule: o-carbamoyltransferase tobz; PDBTitle: crystal structure of the o-carbamoyltransferase tobz in complex with2 adp PDB Entry: PDBe RCSB PDBj
94	c2bkxB	Alignment	not modelled	40.5	12	PDB header: hydrolase Chain: B: PDB Molecule: glucosamine-6-phosphate deaminase; PDBTitle: structure and kinetics of a monomeric glucosamine-6-2 phosphate deaminase: missing link of the nagb superfamily PDB Entry: PDBe RCSB PDBj
95	d2nx2a1	Alignment	not modelled	40.3	16	Fold: MCP/YpsA-like Superfamily: MCP/YpsA-like Family: YpsA-like PDB entry: PDBe RCSB PDBj
96	c3lwdA	Alignment	not modelled	40.1	24	PDB header: hydrolase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: crystal structure of putative 6-phosphogluconolactonase (yp_574786.1)2 from chromohalobacter salexigens dsm 3043 at 1.88 a resolution PDB Entry: PDBe RCSB PDBj
97	d2eyqa4	Alignment	not modelled	38.8	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain PDB entry: PDBe RCSB PDBj
98	d2aa4a1	Alignment	not modelled	38.8	11	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: ROK PDB entry: PDBe RCSB PDBj
99	d1vl1a	Alignment	not modelled	38.7	14	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: NagB-like PDB entry: PDBe RCSB PDBj
100	c3ch4B	Alignment	not modelled	38.2	33	PDB header: transferase Chain: B: PDB Molecule: phosphomevalonate kinase; PDBTitle: the crystal structure of human phosphomevalonate kinase at2 1.8 a resolution PDB Entry: PDBe RCSB PDBj
101	c4r9nA	Alignment	not modelled	37.8	9	PDB header: transcription Chain: A: PDB Molecule: lmo0547 protein; PDBTitle: deor family transcriptional regulator from listeria monocytogenes. PDB Entry: PDBe RCSB PDBj
102	d1qgpa	Alignment	not modelled	37.0	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain PDB entry: PDBe RCSB PDBj
103	c6h7gB	Alignment	not modelled	36.9	21	PDB header: photosynthesis Chain: B: PDB Molecule: phosphoribulokinase, chloroplastic; PDBTitle: crystal structure of redox-sensitive phosphoribulokinase (prk) from2 the green algae chlamydomonas reinhardtii PDB Entry: PDBe RCSB PDBj
104	d1qbjc	Alignment	not modelled	36.7	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain PDB entry: PDBe RCSB PDBj
105	c3n0vD	Alignment	not modelled	36.7	19	PDB header: hydrolase Chain: D: PDB Molecule: formyltetrahydrofolate deformylase; PDBTitle: crystal structure of a formyltetrahydrofolate deformylase (pp_0327)2 from pseudomonas putida kt2440 at 2.25 a resolution PDB Entry: PDBe RCSB PDBj
106	c3o1lB	Alignment	not modelled	36.2	17	PDB header: hydrolase Chain: B: PDB Molecule: formyltetrahydrofolate deformylase; PDBTitle: crystal structure of a formyltetrahydrofolate deformylase (pspto_4314)2 from pseudomonas syringae pv. tomato str. dc3000 at 2.20 a resolution PDB Entry: PDBe RCSB PDBj
107	c2i14B	Alignment	not modelled	35.7	28	PDB header: transferase Chain: B: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of nicotinate-nucleotide2 pyrophosphorylase from pyrococcus furiosus PDB Entry: PDBe RCSB PDBj
108	c3zeuE	Alignment	not modelled	35.4	31	PDB header: hydrolase Chain: E: PDB Molecule: probable trna threonylcarbamoyladenosine biosynthesis PDBTitle: structure of a salmonella typhimurium ygjd-yeaz heterodimer bound to2 atpgammas PDB Entry: PDBe RCSB PDBj
109	c3nwpA	Alignment	not modelled	35.2	15	PDB header: hydrolase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: crystal structure of a 6-phosphogluconolactonase (sbal_2240) from2 shewanella baltica os155 at 1.40 a resolution PDB Entry: PDBe RCSB PDBj
110	c3tqcB	Alignment	not modelled	35.0	10	PDB header: transferase Chain: B: PDB Molecule: pantothenate kinase; PDBTitle: structure of the pantothenate kinase (coaa) from coxiella burnetii PDB Entry: PDBe RCSB PDBj
111	c3vthA	Alignment	not modelled	34.9	21	PDB header: transferase Chain: A: PDB Molecule: hydrogenase maturation factor; PDBTitle: crystal structure of full-length hypf in the phosphate-and2 nucleotide-bound form PDB Entry: PDBe RCSB PDBj
112	c1smkD	Alignment	not modelled	34.6	16	PDB header: oxidoreductase Chain: D: PDB Molecule: malate dehydrogenase, glyoxysomal; PDBTitle: mature and translocatable forms of glyoxysomal malate2 dehydrogenase have different activities and stabilities3 but similar crystal structures PDB Entry: PDBe RCSB PDBj
						PDB header: transferase

113	c1ytkA_	 Alignment	not modelled	34.5	23	Chain: A: PDB Molecule: nicotinate phosphoribosyltransferase from thermoplasma PDBTitle: crystal structure of a nicotinate phosphoribosyltransferase from2 thermoplasma acidophilum with nicotinate mononucleotide PDB Entry: PDBe RCSB PDBj
114	d2gxba1	 Alignment	not modelled	34.0	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Z-DNA binding domain PDB entry: PDBe RCSB PDBj
115	c7cokB_	 Alignment	not modelled	33.9	26	PDB header: oxidoreductase Chain: B: PDB Molecule: 5-ketofructose reductase; PDBTitle: crystal structure of ligand-free form of 5-ketofructose reductase of2 gluconobacter sp. strain chm43 PDB Entry: PDBe RCSB PDBj
116	c3louB_	 Alignment	not modelled	33.9	16	PDB header: hydrolase Chain: B: PDB Molecule: formyltetrahydrofolate deformylase; PDBTitle: crystal structure of formyltetrahydrofolate deformylase (yp_105254.1)2 from burkholderia mallei atcc 23344 at 1.90 a resolution PDB Entry: PDBe RCSB PDBj
117	c1pbtA_	 Alignment	not modelled	33.4	11	PDB header: hydrolase, oxidoreductase Chain: A: PDB Molecule: 6-phosphogluconolactonase; PDBTitle: the crystal structure of tm1154, oxidoreductase, sol/devb2 family from thermotoga maritima PDB Entry: PDBe RCSB PDBj
118	c4adsF_	 Alignment	not modelled	32.8	30	PDB header: transferase/transferase Chain: F: PDB Molecule: pyridoxine biosynthetic enzyme pdx1 homologue, putative; PDBTitle: crystal structure of plasmodial plp synthase complex PDB Entry: PDBe RCSB PDBj
119	c2zbtB_	 Alignment	not modelled	32.8	32	PDB header: lyase Chain: B: PDB Molecule: pyridoxal biosynthesis lyase pdxs; PDBTitle: crystal structure of pyridoxine biosynthesis protein from thermus2 thermophilus hb8 PDB Entry: PDBe RCSB PDBj
120	c3lhiA_	 Alignment	not modelled	32.7	26	PDB header: hydrolase Chain: A: PDB Molecule: putative 6-phosphogluconolactonase; PDBTitle: crystal structure of putative 6-phosphogluconolactonase(yp_207848.1)2 from neisseria gonorrhoeae fa 1090 at 1.33 a resolution PDB Entry: PDBe RCSB PDBj