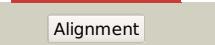
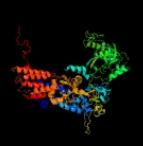
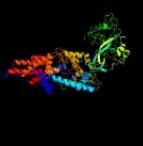
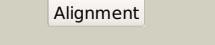
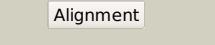
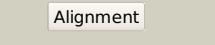
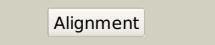


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD0041_(leuS)_43562_46471
Date	Tue Jul 23 14:50:07 BST 2019
Unique Job ID	e5e855f70169a7dc

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2bytD_			100.0	43	PDB header: synthetase Chain: D: PDB Molecule: leucyl-trna synthetase; PDBTitle: thermus thermophilus leucyl-trna synthetase complexed with2 a trnaleu transcript in the post-editing conformation
2	c4ariA_			100.0	40	PDB header: ligase/rna Chain: A: PDB Molecule: leucine--trna ligase; PDBTitle: ternary complex of e. coli leucyl-trna synthetase, trna(leu) and the2 benzoxaborole an2679 in the editing conformation
3	c6q8aA_			100.0	37	PDB header: ligase Chain: A: PDB Molecule: leucine--trna ligase; PDBTitle: neisseria gonorrhoeae leucyl-trna synthetase in complex with 5'-o-(n-2 (l-leucyl)-sulfamoyl)cytidine
4	c1qu2A_			100.0	20	PDB header: ligase/rna Chain: A: PDB Molecule: isoleucyl-trna synthetase; PDBTitle: insights into editing from an ile-trna synthetase structure2 with trna(ile) and mupirocin
5	c5ah5B_			100.0	31	PDB header: ligase/rna Chain: B: PDB Molecule: leucine--trna ligase; PDBTitle: crystal structure of the ternary complex of agrobacterium2 radiobacter k84 agnb2 leurs-trna-leuams
6	c1ohbA_			100.0	42	PDB header: synthetase Chain: A: PDB Molecule: leucyl-trna synthetase; PDBTitle: leucyl-trna synthetase from thermus thermophilus complexed2 with a pre-transfer editing substrate analogue in both3 synthetic active site and editing site
7	c1wz2B_			100.0	18	PDB header: ligase/rna Chain: B: PDB Molecule: leucyl-trna synthetase; PDBTitle: the crystal structure of leucyl-trna synthetase and trna(leucine)2 complex
8	c1gaxB_			100.0	23	PDB header: ligase/rna Chain: B: PDB Molecule: valyl-trna synthetase; PDBTitle: crystal structure of thermus thermophilus valyl-trna2 synthetase complexed with trna(val) and valyl-adenylate3 analogue
9	c1ileA_			100.0	20	PDB header: aminoacyl-trna synthetase Chain: A: PDB Molecule: isoleucyl-trna synthetase; PDBTitle: isoleucyl-trna synthetase
10	c1wkbA_			100.0	19	PDB header: ligase Chain: A: PDB Molecule: leucyl-trna synthetase; PDBTitle: crystal structure of leucyl-trna synthetase from the2 archaeon pyrococcus horikoshii reveals a novel editing3 domain orientation
11	c3ziuA_			100.0	45	PDB header: ligase Chain: A: PDB Molecule: leucyl-trna synthetase; PDBTitle: crystal structure of mycoplasma mobile leucyl-trna2 synthetase with leu-ams in the active site

12	c3ziuB			100.0	47	PDB header: ligase Chain: B; PDB Molecule: leucyl-tRNA synthetase; PDBTitle: crystal structure of mycoplasma mobile leucyl-tRNA synthetase with leu-ams in the active site
13	d1h3na3			100.0	43	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
14	c5gl7A			100.0	22	PDB header: ligase Chain: A; PDB Molecule: methionine--tRNA ligase, cytoplasmic; PDBTitle: crystal structure of a truncated human cytosolic methionyl-tRNA synthetase
15	c1rqgA			100.0	23	PDB header: ligase Chain: A; PDB Molecule: methionyl-tRNA synthetase; PDBTitle: methionyl-tRNA synthetase from pyrococcus abyssi
16	d1ffya3			100.0	25	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
17	c1pfuA			100.0	24	PDB header: ligase Chain: A; PDB Molecule: methionyl-tRNA synthetase; PDBTitle: methionyl-tRNA synthetase from escherichia coli complexed2 with methionine phosphinate
18	c3tunA			100.0	22	PDB header: ligase/ligase inhibitor Chain: A; PDB Molecule: methionyl-tRNA synthetase; PDBTitle: trypanosoma brucei methionyl-tRNA synthetase in complex with inhibitor2 chem 1356
19	c5urbB			100.0	18	PDB header: ligase Chain: B; PDB Molecule: methionine--tRNA ligase; PDBTitle: crystal structure of methionyl-tRNA synthetase (metRS) from2 acinetobacter baumannii with bound L-methionine
20	c4qrdA			100.0	25	PDB header: ligase/ligase inhibitor Chain: A; PDB Molecule: methionyl-tRNA synthetase; PDBTitle: structure of methionyl-tRNA synthetase in complex with n-(1H-2-benzimidazol-2-ylmethyl)-n'-(2,4-dichlorophenyl)-6-(morpholin-4-yl)-3-1,3,5-triazine-2,4-diamine
21	c3kflA		not modelled	100.0	22	PDB header: ligase Chain: A; PDB Molecule: methionyl-tRNA synthetase; PDBTitle: leishmania major methionyl-tRNA synthetase in complex with2 methionyladenylate and pyrophosphate
22	d1ilea3		not modelled	100.0	24	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
23	c1woyA		not modelled	100.0	22	PDB header: ligase Chain: A; PDB Molecule: methionyl-tRNA synthetase; PDBTitle: crystal structure of methionyl tRNA synthetase y225f mutant2 from thermus thermophilus
24	c4dlpA		not modelled	100.0	27	PDB header: ligase Chain: A; PDB Molecule: aminoacyl-tRNA synthetase, class i:aminoacyl-tRNA PDBTitle: crystal structure of methionyl-tRNA synthetase metRS from brucella2 melitensis bound to selenomethionine
25	d1ivsa4		not modelled	100.0	28	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
26	c5xqqB		not modelled	100.0	24	PDB header: ligase Chain: B; PDB Molecule: methionine-tRNA ligase; PDBTitle: crystal structure of apo form (free-state) mycobacterium tuberculosis2 methionyl-tRNA synthetase
27	c2ct8A		not modelled	100.0	25	PDB header: ligase/rna Chain: A; PDB Molecule: methionyl-tRNA synthetase; PDBTitle: crystal structure of aquifex aeolicus methionyl-tRNA synthetase complexed with tRNA(met) and methionyl-adenylate3 analogue
28	c4dlpB		not modelled	100.0	28	PDB header: ligase Chain: B; PDB Molecule: aminoacyl-tRNA synthetase, class i:aminoacyl-tRNA

						PDBTitle: crystal structure of methionyl-tRNA synthetase metRS from brucella2 melitensis bound to selenomethionine
29	c2x1IC	Alignment	not modelled	100.0	26	PDB header: ligase Chain: C: PDB Molecule: methionyl-tRNA synthetase; PDBTitle: crystal structure of mycobacterium smegmatis methionyl-tRNA synthetase2 in complex with methionine and adenosine
30	d1rqga2	Alignment	not modelled	100.0	26	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
31	d2d5ba2	Alignment	not modelled	100.0	25	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
32	d1pfva2	Alignment	not modelled	100.0	24	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
33	c5fodB	Alignment	not modelled	100.0	20	PDB header: ligase Chain: B: PDB Molecule: leucyl-tRNA synthetase; PDBTitle: crystal structure of the p.falciparum cytosolic leucyl-tRNA synthetase2 editing domain (space group p1) containing deletions of insertions 13 and 3
34	c5agrA	Alignment	not modelled	100.0	98	PDB header: ligase Chain: A: PDB Molecule: leucine-tRNA ligase; PDBTitle: crystal structure of the leus editing domain of mycobacterium tuberculosis in complex with the adduct (s)-3-(aminomethyl)-7-3 ethoxybenzo[c][1,2]oxaborol-1(3h)-ol-amp
35	d1h3na2	Alignment	not modelled	100.0	52	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
36	c3o0aB	Alignment	not modelled	100.0	44	PDB header: ligase Chain: B: PDB Molecule: leucyl-tRNA synthetase subunit alpha; PDBTitle: crystal structure of the wild type cp1 hydrolitic domain from aquifex2 aeolicus leucyl-tRNA
37	c4k48A	Alignment	not modelled	100.0	52	PDB header: ligase Chain: A: PDB Molecule: leucine-tRNA ligase; PDBTitle: structure of the streptococcus pneumoniae leucyl-tRNA synthetase2 editing domain
38	c2ajhA	Alignment	not modelled	100.0	40	PDB header: ligase Chain: A: PDB Molecule: leucyl-tRNA synthetase; PDBTitle: crystal structure of the editing domain of e. coli leucyl-tRNA synthetase complexes with methionine
39	d1udza	Alignment	not modelled	100.0	22	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
40	c2wfdB	Alignment	not modelled	100.0	17	PDB header: ligase Chain: B: PDB Molecule: leucyl-tRNA synthetase, cytoplasmic; PDBTitle: structure of the human cytosolic leucyl-tRNA synthetase2 editing domain
41	c5fofD	Alignment	not modelled	100.0	11	PDB header: ligase Chain: D: PDB Molecule: leucyl-tRNA synthetase; PDBTitle: crystal structure of the p.knowlesi cytosolic leucyl-tRNA synthetase editing domain
42	c5fogA	Alignment	not modelled	100.0	17	PDB header: lyase Chain: A: PDB Molecule: leucyl-tRNA synthetase; PDBTitle: crystal structure of hte cryptosporidium muris cytosolic leucyl-tRNA synthetase editing domain complex with a post-3 transfer editing analogue of norvaline (nv2aa)
43	d1wkaa1	Alignment	not modelled	100.0	30	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
44	c1u0bB	Alignment	not modelled	100.0	19	PDB header: ligase/rna Chain: B: PDB Molecule: cysteinyl tRNA; PDBTitle: crystal structure of cysteinyl-tRNA synthetase binary2 complex with trnacys
45	d1ffya2	Alignment	not modelled	100.0	18	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
46	c3pz6F	Alignment	not modelled	100.0	19	PDB header: ligase Chain: F: PDB Molecule: leucyl-tRNA synthetase; PDBTitle: the crystal structure of gileurs-cp1
47	c2wfgA	Alignment	not modelled	100.0	19	PDB header: ligase Chain: A: PDB Molecule: cytosolic leucyl-tRNA synthetase; PDBTitle: structure of the candida albicans cytosolic leucyl-tRNA synthetase editing domain bound to a benzoxaborole-amp3 adduct
48	c3tqoA	Alignment	not modelled	100.0	22	PDB header: ligase Chain: A: PDB Molecule: cysteinyl-tRNA synthetase; PDBTitle: structure of the cysteinyl-tRNA synthetase (cyss) from coxiella2 burnetii.
49	c3c8zB	Alignment	not modelled	100.0	25	PDB header: ligase Chain: B: PDB Molecule: cysteinyl-tRNA synthetase; PDBTitle: the 1.6 Å crystal structure of mshc: the rate limiting enzyme in the mycothiol biosynthetic pathway
50	c3sp1B	Alignment	not modelled	100.0	16	PDB header: ligase Chain: B: PDB Molecule: cysteinyl-tRNA synthetase; PDBTitle: crystal structure of cysteinyl-tRNA synthetase (cyss) from borrelia2 burgdorferi
51	d1li5a2	Alignment	not modelled	100.0	25	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
52	c3fnrA	Alignment	not modelled	100.0	20	PDB header: transferase Chain: A: PDB Molecule: arginyl-tRNA synthetase; PDBTitle: crystal structure of putative arginyl tRNA synthetase from campylobacter jejuni;
53	c1iq0A	Alignment	not modelled	100.0	17	PDB header: ligase Chain: A: PDB Molecule: arginyl-tRNA synthetase; PDBTitle: thermus thermophilus arginyl-tRNA synthetase
						PDB header: ligase

54	c4xkzA		not modelled	99.9	20	Chain: A: PDB Molecule: valine-tRNA ligase; PDBTitle: crystal structure of the c-terminal anticodon loop binding domain of a2 valyl-tRNA synthetase from pseudomonas aeruginosa PDB header: ligase
55	c6ao8A		not modelled	99.9	18	Chain: A: PDB Molecule: arginine-tRNA ligase; PDBTitle: crystal structure of arginyl-tRNA synthetase from neisseria gonorrhoeae in complex with arginine Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
56	d1ivsa2		not modelled	99.9	17	PDB header: ligase Chain: A: PDB Molecule: arginine-tRNA ligase; PDBTitle: crystal structure of e.coli arginyl-tRNA synthetase and ligand binding2 studies revealed key residues in arginine recognition Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
57	c4obyA		not modelled	99.9	19	PDB header: ligase Chain: A: PDB Molecule: arginine-tRNA ligase; PDBTitle: crystal structure of e.coli arginyl-tRNA synthetase and ligand binding2 studies revealed key residues in arginine recognition Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
58	d1h3na1		not modelled	99.9	39	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
59	d1ilea1		not modelled	99.9	22	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases PDB header: ligase Chain: A: PDB Molecule: arginyl-tRNA synthetase, putative; PDBTitle: crystal structure of arginyl-tRNA synthetase from plasmodium falciparum (pfrrs)
60	c5jldA		not modelled	99.9	12	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
61	d1qu3a1		not modelled	99.9	17	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
62	d1ffya1		not modelled	99.9	16	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
63	d1iq0a2		not modelled	99.9	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
64	c2zufA		not modelled	99.8	20	PDB header: ligase/rna Chain: A: PDB Molecule: arginyl-tRNA synthetase; PDBTitle: crystal structure of pyrococcus horikoshii arginyl-tRNA synthetase complexed with tRNA(arg)
65	d1rqga1		not modelled	99.7	15	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
66	c1f7ua		not modelled	99.5	19	PDB header: ligase/rna Chain: A: PDB Molecule: arginyl-tRNA synthetase; PDBTitle: crystal structure of the arginyl-tRNA synthetase complexed with the2 tRNA(arg) and L-arg
67	c4r3zB		not modelled	99.5	23	PDB header: protein binding/ligase Chain: B: PDB Molecule: arginine-tRNA ligase, cytoplasmic; PDBTitle: crystal structure of human ARGRS-GlnRS-AIMP1 complex
68	c4q2tB		not modelled	99.4	14	PDB header: ligase Chain: B: PDB Molecule: arginine-tRNA ligase, cytoplasmic; PDBTitle: crystal structure of arginyl-tRNA synthetase complexed with L-arginine
69	d1irxa2		not modelled	99.4	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
70	d2d5ba1		not modelled	99.4	15	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
71	d1pfva1		not modelled	99.4	11	Fold: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Superfamily: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases Family: Anticodon-binding domain of a subclass of class I aminoacyl-tRNA synthetases
72	d1f7ua2		not modelled	99.3	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
73	c1g59A		not modelled	99.3	23	PDB header: ligase/rna Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: glutamyl-tRNA synthetase complexed with tRNA(glu).
74	c1irxA		not modelled	98.2	23	PDB header: ligase Chain: A: PDB Molecule: lysyl-tRNA synthetase; PDBTitle: crystal structure of class I lysyl-tRNA synthetase
75	c4grb		not modelled	98.1	13	PDB header: ligase Chain: B: PDB Molecule: glutamate-tRNA ligase; PDBTitle: crystal structure of a glutamyl-tRNA synthetase glurs from borrelia2 burgdorferi bound to glutamic acid and zinc PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase 1;

76	c2o5rA	Alignment	not modelled	98.0	9	PDBTitle: crystal structure of glutamyl-tRNA synthetase 1 (ec 6.1.1.17)2 (glutamate-tRNA ligase 1) (glurs 1) (tm1351) from thermotoga maritima3 at 2.5 a resolution PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase 2; PDBTitle: crystal structure of thermotoga maritima nondiscriminating glutamyl-2 tRNA synthetase in complex with a glutamyl-amp analog
77	c3afhA	Alignment	not modelled	98.0	8	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
78	d1gtra2	Alignment	not modelled	97.9	34	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: mycobacterium tuberculosis glutamyl-tRNA synthetase
79	c2ja2A	Alignment	not modelled	97.9	11	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: mycobacterium tuberculosis glutamyl-tRNA synthetase
80	c5h4vE	Alignment	not modelled	97.9	11	PDB header: ligase Chain: E: PDB Molecule: glutamate-tRNA ligase; PDBTitle: structure of glutamyl-tRNA synthetase (xoo1504) from xanthomonas2 oryzae pv. oryzae
81	c2cfoA	Alignment	not modelled	97.8	27	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: non-discriminating glutamyl-tRNA synthetase from thermosynechococcus elongatus in complex with glu
82	c3aiiA	Alignment	not modelled	97.7	28	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: archaeal non-discriminating glutamyl-tRNA synthetase from methanothermobacter thermautrophicus
83	c5tgtA	Alignment	not modelled	97.7	12	PDB header: ligase Chain: A: PDB Molecule: glutamate-tRNA ligase; PDBTitle: crystal structure of glytamyl-tRNA synthetase glurs from pseudomonas2 aeruginosa
84	c6b1pA	Alignment	not modelled	97.6	23	PDB header: ligase Chain: A: PDB Molecule: glutamate-tRNA ligase 1; PDBTitle: crystal structure of glutamate-tRNA synthetase from helicobacter2 pylori
85	c4r3zC	Alignment	not modelled	97.6	22	PDB header: protein binding/ligase Chain: C: PDB Molecule: glutamine-tRNA ligase; PDBTitle: crystal structure of human argrs-glnrs-aimp1 complex
86	c2hz7A	Alignment	not modelled	97.5	24	PDB header: ligase Chain: A: PDB Molecule: glutaminyl-tRNA synthetase; PDBTitle: crystal structure of the glutaminyl-tRNA synthetase from deinococcus2 radiodurans
87	c4h3sA	Alignment	not modelled	97.5	28	PDB header: ligase Chain: A: PDB Molecule: glutamine-tRNA ligase; PDBTitle: the structure of glutaminyl-tRNA synthetase from saccharomyces2 cerevisiae
88	c1exdA	Alignment	not modelled	97.5	24	PDB header: ligase/rna Chain: A: PDB Molecule: glutaminyl-tRNA synthetase; PDBTitle: crystal structure of a tight-binding glutamine tRNA bound2 to glutamine aminoacyl tRNA synthetase
89	d1nzja	Alignment	not modelled	97.5	26	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
90	c5zdoA	Alignment	not modelled	97.4	29	PDB header: ligase Chain: A: PDB Molecule: glutamine-tRNA ligase; PDBTitle: crystal structure analysis of ttqrs in co-crystallised with atp
91	c6b1zA	Alignment	not modelled	97.4	20	PDB header: ligase Chain: A: PDB Molecule: glutamate-tRNA ligase; PDBTitle: crystal structure of glutamate-tRNA synthetase from elizabethkingia2 anophelis
92	c3al0C	Alignment	not modelled	97.4	30	PDB header: ligase/rna Chain: C: PDB Molecule: glutamyl-tRNA(gln) amidotransferase subunit c, linker, PDBTitle: crystal structure of the glutamine transamidosome from thermotoga2 maritima in the glutamylation state.
93	c5bnzA	Alignment	not modelled	97.3	22	PDB header: ligase Chain: A: PDB Molecule: glutamine-tRNA ligase; PDBTitle: crystal structure of glutamine-tRNA ligase /glutaminyl-tRNA synthetase2 (glnrs) from pseudomonas aeruginosa
94	c4ye6A	Alignment	not modelled	97.3	21	PDB header: ligase Chain: A: PDB Molecule: glutamine-tRNA ligase; PDBTitle: the crystal structure of the intact human glnrs
95	c4p2bA	Alignment	not modelled	97.3	19	PDB header: ligase Chain: A: PDB Molecule: glutamine aminoacyl-tRNA synthetase; PDBTitle: crystal structure of the apo form of the glutaminyl-tRNA synthetase2 catalytic domain from toxoplasma gondii.
96	d1j09a2	Alignment	not modelled	97.0	23	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
97	c4g6zA	Alignment	not modelled	96.9	23	PDB header: ligase Chain: A: PDB Molecule: glutamate-tRNA ligase; PDBTitle: crystal structure of a glutamyl-tRNA synthetase glurs from burkholderia thailandensis bound to l-glutamate
98	c6mtkA	Alignment	not modelled	96.5	11	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-tRNA synthetase; PDBTitle: crystal structure of tryptophanyl-tRNA synthetase from elizabethkingia2 anophelis nuhp1
99	c1h3eA	Alignment	not modelled	96.5	21	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-tRNA synthetase; PDBTitle: tyrosyl-tRNA synthetase from thermus thermophilus complexed with wild-type trnatyr(gua) and with atp and tyrosinol
100	c6otjA	Alignment	not modelled	96.3	15	PDB header: ligase Chain: A: PDB Molecule: tyrosine-tRNA ligase; PDBTitle: crystal structure of tyrosyl-tRNA synthetase from neisseria2 gonorrhoeae with bound l-tyr
101	c2cybA	Alignment	not modelled	96.0	13	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-tRNA synthetase; PDBTitle: crystal structure of tyrosyl-tRNA synthetase complexed with l-tyrosine from archaeoglobus fulgidus

102	c5ekdA		Alignment	not modelled	95.9	11	PDB header: ligase/antibiotic Chain: A: PDB Molecule: tryptophan--trna ligase, mitochondrial; PDBTitle: human mitochondrial tryptophanyl-trna synthetase bound by indolmycin2 and mn*atp.
103	c3hv0A		Alignment	not modelled	95.6	17	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase from cryptosporidium parvum
104	c2janD		Alignment	not modelled	95.4	21	PDB header: ligase Chain: D: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: tyrosyl-trna synthetase from mycobacterium tuberculosis in2 unliganded state
105	d2ts1a		Alignment	not modelled	95.3	24	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
106	c2ts1A		Alignment	not modelled	95.3	24	PDB header: ligase (synthetase) Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: structure of tyrosyl-tRNA synthetase refined at 2.3 angstroms2 resolution. interaction of the enzyme with the tyrosyl adenylate3 intermediate
107	d1h3fa1		Alignment	not modelled	95.2	19	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
108	c3vgjB		Alignment	not modelled	94.9	15	PDB header: ligase Chain: B: PDB Molecule: tyrosyl-trna synthetase, putative; PDBTitle: crystal of plasmodium falciparum tyrosyl-trna synthetase (pftyrrs)in2 complex with adenylate analog
109	c3a05A		Alignment	not modelled	94.9	22	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from2 hyperthermophilic archaeon, aeropyrum pernix k1 complex3 with tryptophan
110	d1i6la		Alignment	not modelled	94.8	7	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
111	c2j5bA		Alignment	not modelled	94.8	15	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: structure of the tyrosyl trna synthetase from acanthamoeba polyphaga2 mimivirus complexed with tyrosynol
112	c1x8xA		Alignment	not modelled	94.6	19	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: tyrosyl tRNA synthetase from e.coli complexed with tyrosine
113	c2quiB		Alignment	not modelled	94.5	16	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structures of human tryptophanyl-trna synthetase in2 complex with tryptophanamide and atp
114	d1j1ua		Alignment	not modelled	94.2	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
115	c3n9iA		Alignment	not modelled	94.1	14	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from yersinia pestis2 co92
116	c3focB		Alignment	not modelled	94.1	14	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase from giardia lamblia
117	c2pidB		Alignment	not modelled	94.0	26	PDB header: ligase Chain: B: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: crystal structure of human mitochondrial tyrosyl-trna synthetase in2 complex with an adenylate analog
118	d1jila		Alignment	not modelled	94.0	17	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
119	c1jiIA		Alignment	not modelled	94.0	16	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: crystal structure of s. aureus tyrrs in complex with sb-219383
120	d1r6ta2		Alignment	not modelled	93.8	17	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain