



















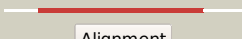












Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2448c_(valS)_2747605_2750235
Date	Wed Aug 7 12:50:07 BST 2019
Unique Job ID	6b6f4b2ee0651e9b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1gaxB_	 Alignment		100.0	45	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
2	c1qu2A_	 Alignment		100.0	26	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
3	c1ileA_	 Alignment		100.0	28	PDB header: aminoacyl-trna synthetase Chain: A: PDB Molecule: isoleucyl-trna synthetase; PDBTitle: isoleucyl-trna synthetase
4	c1wz2B_	 Alignment		100.0	22	PDB header: ligase/rna Chain: B: PDB Molecule: leucyl-trna synthetase; PDBTitle: the crystal structure of leucyl-trna synthetase and trna(leucine)2 complex
5	c2bytD_	 Alignment		100.0	31	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
6	c4aria_	 Alignment		100.0	26	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
7	c5ah5B_	 Alignment		100.0	23	PDB header: ligase/rna Chain: B: PDB Molecule: leucine--trna ligase; PDBTitle: crystal structure of the ternary complex of agrobacterium2 radiobacter k84 agnb2 leu-trna-leuams
8	c1wkbA_	 Alignment		100.0	23	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
9	c6q8aA_	 Alignment		100.0	29	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
10	c1obhA_	 Alignment		100.0	27	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
11	c3ziuA_	 Alignment		100.0	24	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	Alignment		100.0	22	PDB header: ligase Chain: B: PDB Molecule: leucyl-trna synthetase; PDBTitle: crystal structure of mycoplasma mobile leucyl-trna2 synthetase with leu-ams in the active site
13	c5gl7A	Alignment		100.0	20	PDB header: ligase Chain: A: PDB Molecule: methionine--trna ligase, cytoplasmic; PDBTitle: crystal structure of a truncated human cytosolic methionyl-trna2 synthetase
14	c1rqgA	Alignment		100.0	20	PDB header: ligase Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: methionyl-trna synthetase from pyrococcus abyssi
15	d1ffya3	Alignment		100.0	31	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
16	d1h3na3	Alignment		100.0	33	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
17	c5urbB	Alignment		100.0	21	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
18	c1pfuA	Alignment		100.0	22	PDB header: ligase Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: methionyl-trna synthetase from escherichia coli complexed2 with methionine phosphinate
19	d1ilea3	Alignment		100.0	32	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
20	c4qrdA	Alignment		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	c3tunA	Alignment	not modelled	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
22	d1ivsa4	Alignment	not modelled	100.0	57	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
23	c3kflA	Alignment	not modelled	100.0	23	PDB header: ligase Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: leishmania major methionyl-trna synthetase in complex with2 methionyladenylate and pyrophosphate
24	c4dlpA	Alignment	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	c1woyA	Alignment	not modelled	100.0	27	PDB header: ligase Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: crystal structure of methionyl trna synthetase y225f mutant2 from thermus thermophilus
26	c5xgqB	Alignment	not modelled	100.0	23	PDB header: ligase Chain: B: PDB Molecule: methionine-trna ligase; PDBTitle: crystal structure of apo form (free-state) mycobacterium tuberculosis2 methionyl-trna synthetase
27	c4dlpB	Alignment	not modelled	100.0	29	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
28	c2x1lC	Alignment	not modelled	100.0	29	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
29	c2ct8A	Alignment	not modelled	100.0	24	PDB header: ligase/rna Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: crystal structure of aquifex aeolicus methionyl-trna2 synthetase complexed with trna(met) and methionyl-adenylate3 analogue
30	d1rqga2	Alignment	not modelled	100.0	23	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
31	d2d5ba2	Alignment	not modelled	100.0	31	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
32	d1pfva2	Alignment	not modelled	100.0	28	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
33	c1u0bB	Alignment	not modelled	100.0	22	PDB header: ligase/rna Chain: B: PDB Molecule: cysteinyln trna; PDBTitle: crystal structure of cysteinyln-trna synthetase binary2 complex with trnacys
34	c3sp1B	Alignment	not modelled	100.0	17	PDB header: ligase Chain: B: PDB Molecule: cysteinyln-trna synthetase; PDBTitle: crystal structure of cysteinyln-trna synthetase (cyss) from borrelia2 burgdorferi
35	c3c8zB	Alignment	not modelled	100.0	21	PDB header: ligase Chain: B: PDB Molecule: cysteinyln-trna synthetase; PDBTitle: the 1.6 a crystal structure of mshc: the rate limiting2 enzyme in the mycothiol biosynthetic pathway
36	c3tqoA	Alignment	not modelled	100.0	23	PDB header: ligase Chain: A: PDB Molecule: cysteinyln-trna synthetase; PDBTitle: structure of the cysteinyln-trna synthetase (cyss) from coxiella2 burnetii.
37	c4xkzA	Alignment	not modelled	100.0	27	PDB header: ligase 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
38	c5fodB	Alignment	not modelled	100.0	27	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
39	d1ivsa2	Alignment	not modelled	100.0	32	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
40	c3fnrA	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: arginyln-trna synthetase; PDBTitle: crystal structure of putative arginyln t-rna synthetase from2 campylobacter jejuni;
41	d1wkaa1	Alignment	not modelled	100.0	45	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
42	d1li5a2	Alignment	not modelled	100.0	24	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
43	c1iq0A	Alignment	not modelled	100.0	17	PDB header: ligase Chain: A: PDB Molecule: arginyln-trna synthetase; PDBTitle: thermus thermophilus arginyln-trna synthetase
44	c6ao8A	Alignment	not modelled	100.0	18	PDB header: ligase Chain: A: PDB Molecule: arginine--trna ligase; PDBTitle: crystal structure of arginyln-trna synthetase from neisseria2 gonorrhoeae in complex with arginine
45	d1ludza	Alignment	not modelled	100.0	28	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
46	c4obyA	Alignment	not modelled	100.0	21	PDB header: ligase Chain: A: PDB Molecule: arginine--trna ligase; PDBTitle: crystal structure of e.coli arginyln-trna synthetase and ligand binding2 studies revealed key residues in arginine recognition
47	d1ilea1	Alignment	not modelled	100.0	26	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
48	d1qu3a1	Alignment	not modelled	100.0	19	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
49	d1ffya2	Alignment	not modelled	100.0	30	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
50	c3o0aB	Alignment	not modelled	100.0	24	PDB header: ligase Chain: B: PDB Molecule: leucyl-trna synthetase subunit alpha; PDBTitle: crystal structure of the wild type cp1 hydrolytic domain from aquifex2 aeolicus leucyl-trna
51	c5fofD	Alignment	not modelled	100.0	18	PDB header: ligase Chain: D: PDB Molecule: leucyl-trna synthetase; PDBTitle: crystal structure of the p.knowlesi cytosolic leucyl-trna2 synthetase editing domain
52	c2ajhA	Alignment	not modelled	100.0	28	PDB header: ligase Chain: A: PDB Molecule: leucyl-trna synthetase; PDBTitle: crystal structure of the editing domain of e. coli leucyl-trna2 synthetase complexes with methionine

53	d1h3na2	Alignment	not modelled	100.0	28	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
54	c2wfgA	Alignment	not modelled	100.0	25	PDB header: ligase Chain: A: PDB Molecule: cytosolic leucyl-trna synthetase; PDBTitle: structure of the candida albicans cytosolic leucyl-trna2 synthetase editing domain bound to a benzoxaborole-amp3 adduct
55	c2wfdB	Alignment	not modelled	100.0	22	PDB header: ligase Chain: B: PDB Molecule: leucyl-trna synthetase, cytoplasmic; PDBTitle: structure of the human cytosolic leucyl-trna synthetase2 editing domain
56	c5agrA	Alignment	not modelled	100.0	24	PDB header: ligase Chain: A: PDB Molecule: leucine--trna ligase; PDBTitle: crystal structure of the leuRS editing domain of mycobacterium2 tuberculosis in complex with the adduct (s)-3-(aminomethyl)-7-3 ethoxybenzo[c][1,2]oxaborol-1(3h)-ol-amp
57	c5fogA	Alignment	not modelled	100.0	32	PDB header: lyase Chain: A: PDB Molecule: leucyl-trna synthetase; PDBTitle: crystal structure of hte cryptosporidium muris cytosolic2 leucyl-trna synthetase editing domain complex with a post-3 transfer editing analogue of norvaline (nv2aa)
58	c4k48A	Alignment	not modelled	100.0	26	PDB header: ligase Chain: A: PDB Molecule: leucine--trna ligase; PDBTitle: structure of the streptococcus pneumoniae leucyl-trna synthetase2 editing domain
59	d1ffya1	Alignment	not modelled	100.0	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
60	c5jldA	Alignment	not modelled	100.0	12	PDB header: ligase Chain: A: PDB Molecule: arginyl-trna synthetase, putative; PDBTitle: crystal structure of arginyl-trna synthetase from plasmodium2 falciparum (pfrs)
61	c3pz6F	Alignment	not modelled	100.0	26	PDB header: ligase Chain: F: PDB Molecule: leucyl-trna synthetase; PDBTitle: the crystal structure of glleuRS-cp1
62	d1iq0a2	Alignment	not modelled	100.0	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
63	c2zufA	Alignment	not modelled	99.9	19	PDB header: ligase/rna Chain: A: PDB Molecule: arginyl-trna synthetase; PDBTitle: crystal structure of pyrococcus horikoshii arginyl-trna2 synthetase complexed with trna(arg)
64	d1irxa2	Alignment	not modelled	99.9	19	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
65	d1f7ua2	Alignment	not modelled	99.9	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
66	c4q2tB	Alignment	not modelled	99.9	16	PDB header: ligase Chain: B: PDB Molecule: arginine--trna ligase, cytoplasmic; PDBTitle: crystal structure of arginyl-trna synthetase complexed with l-arginine
67	d1h3na1	Alignment	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
68	c4r3zB	Alignment	not modelled	99.9	21	PDB header: protein binding/ligase Chain: B: PDB Molecule: arginine--trna ligase, cytoplasmic; PDBTitle: crystal structure of human argRS-glnRS-aimP1 complex
69	c1f7uA	Alignment	not modelled	99.9	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
70	d1rqga1	Alignment	not modelled	99.8	19	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	c1g59A	Alignment	not modelled	99.8	22	PDB header: ligase/rna Chain: A: PDB Molecule: glutamyl-trna synthetase; PDBTitle: glutamyl-trna synthetase complexed with trna(glu).
72	c5h4vE	Alignment	not modelled	99.7	22	PDB header: ligase Chain: E: PDB Molecule: glutamate--trna ligase; PDBTitle: structure of glutamyl-trna synthetase (xoo1504) from xanthomonas2 oryzae pv. oryzae
73	c3afhA	Alignment	not modelled	99.7	29	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
74	c2ja2A	Alignment	not modelled	99.7	22	PDB header: ligase Chain: A: PDB Molecule: glutamyl-trna synthetase; PDBTitle: mycobacterium tuberculosis glutamyl-trna synthetase
75	c2cfoA	Alignment	not modelled	99.7	22	PDB header: ligase Chain: A: PDB Molecule: glutamyl-trna synthetase; PDBTitle: non-discriminating glutamyl-trna synthetase from2 thermosynechococcus elongatus in complex with glu
76	d1pfva1	Alignment	not modelled	99.6	14	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

						tRNA synthetases
77	d2d5ba1	Alignment	not modelled	99.6	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
78	c2o5rA	Alignment	not modelled	99.6	22	PDB header: ligase Chain: A: PDB Molecule: glutamyl-trna synthetase 1; 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
79	c5tgtA	Alignment	not modelled	99.6	20	PDB header: ligase Chain: A: PDB Molecule: glutamate--trna ligase; PDBTitle: crystal structure of glytamyl-trna synthetase glurs from pseudomonas2 aeruginosa
80	c4griB	Alignment	not modelled	99.6	15	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
81	d1qtra2	Alignment	not modelled	99.5	22	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
82	c6b1pA	Alignment	not modelled	99.5	22	PDB header: ligase Chain: A: PDB Molecule: glutamate--trna ligase 1; PDBTitle: crystal structure of glutamate-trna synthetase from helicobacter2 pylori
83	c1irxA	Alignment	not modelled	99.5	19	PDB header: ligase Chain: A: PDB Molecule: lysyl-trna synthetase; PDBTitle: crystal structure of class i lysyl-trna synthetase
84	d1ivsa1	Alignment	not modelled	99.3	32	Fold: Long alpha-hairpin Superfamily: tRNA-binding arm Family: Valyl-tRNA synthetase (ValRS) C-terminal domain
85	c3al0C	Alignment	not modelled	99.2	27	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.
86	c6b1zA	Alignment	not modelled	99.1	20	PDB header: ligase Chain: A: PDB Molecule: glutamate--trna ligase; PDBTitle: crystal structure of glutamate-trna synthetase from elizabethkingia2 anophelis
87	c1exdA	Alignment	not modelled	99.1	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
88	c2hz7A	Alignment	not modelled	98.5	22	PDB header: ligase Chain: A: PDB Molecule: glutaminyl-trna synthetase; PDBTitle: crystal structure of the glutaminyl-trna synthetase from deinococcus2 radiodurans
89	c3aiiA	Alignment	not modelled	98.5	27	PDB header: ligase Chain: A: PDB Molecule: glutamyl-trna synthetase; PDBTitle: archaeal non-discriminating glutamyl-trna synthetase from2 methanothermobacter thermautotrophicus
90	c4r3zC	Alignment	not modelled	98.5	24	PDB header: protein binding/ligase Chain: C: PDB Molecule: glutamine--trna ligase; PDBTitle: crystal structure of human argrs-glnrs-aimp1 complex
91	c5zdoA	Alignment	not modelled	98.5	28	PDB header: ligase Chain: A: PDB Molecule: glutamine-trna ligase; PDBTitle: crystal structure analysis of ttqrs in co-crystallised with atp
92	c4p2bA	Alignment	not modelled	98.5	22	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.
93	c4h3sA	Alignment	not modelled	98.4	24	PDB header: ligase Chain: A: PDB Molecule: glutamine-trna ligase; PDBTitle: the structure of glutaminyl-trna synthetase from saccharomyces2 cerevisiae
94	d1nzza	Alignment	not modelled	98.4	22	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
95	c4ye6A	Alignment	not modelled	98.4	26	PDB header: ligase Chain: A: PDB Molecule: glutamine--trna ligase; PDBTitle: the crystal structure of the intact human glnrs
96	c5bnzA	Alignment	not modelled	98.4	27	PDB header: ligase Chain: A: PDB Molecule: glutamine--trna ligase; PDBTitle: crystal structure of glutamine-trna ligase /glutaminyl-trna synthetase2 (glnrs) from pseudomonas aeruginosa
97	d1j09a2	Alignment	not modelled	98.4	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
98	c4g6zA	Alignment	not modelled	98.3	23	PDB header: ligase Chain: A: PDB Molecule: glutamate-trna ligase; PDBTitle: crystal structure of a glutamyl-trna synthetase glurs from2 burkholderia thailandensis bound to l-glutamate
99	c6otjA	Alignment	not modelled	97.5	17	PDB header: ligase Chain: A: PDB Molecule: tyrosine--trna ligase; PDBTitle: crystal structure of tyrosyl-trna synthetase from neisseria2 gonorrhoeae with bound l-tyr
100	c1h3eA	Alignment	not modelled	97.4	25	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: tyrosyl-trna synthetase from thermus thermophilus complexed with wild-2 type trnatyr(gua) and with atp and tyrosinol
101	c2cybA	Alignment	not modelled	97.3	23	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: crystal structure of tyrosyl-trna synthetase complexed with2 l-tyrosine from archaeoglobus fulgidus

102	c2janD	Alignment	not modelled	97.3	17	PDB header: ligase Chain: D: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: tyrosyl-trna synthetase from mycobacterium tuberculosis in2 unliganded state
103	d1h3fa1	Alignment	not modelled	97.2	26	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
104	c6mtkA	Alignment	not modelled	97.1	23	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from elizabethkingia2 anophelis nuhp1
105	c1jiiA	Alignment	not modelled	97.0	16	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: crystal structure of s. aureus tyrrs in complex with sb-219383
106	c2rkjM	Alignment	not modelled	96.9	18	PDB header: ligase/rna Chain: M: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: cocrystal structure of a tyrosyl-trna synthetase splicing factor with2 a group i intron rna
107	c5tevA	Alignment	not modelled	96.8	29	PDB header: ligase Chain: A: PDB Molecule: tryptophan--trna ligase; PDBTitle: crystal structure of a tryptophanyl-trna synthetase from neisseria2 gonorrhoeae, apo
108	d1jila	Alignment	not modelled	96.6	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
109	c3jxeB	Alignment	not modelled	96.6	17	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of pyrococcus horikoshii tryptophanyl-trna2 synthetase in complex with trpamp
110	c3hv0A	Alignment	not modelled	96.5	15	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase from cryptosporidium parvum
111	c3hzcD	Alignment	not modelled	96.4	9	PDB header: ligase Chain: D: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase homolog from entamoeba histolytica
112	c2j5bA	Alignment	not modelled	96.4	18	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: structure of the tyrosyl trna synthetase from acanthamoeba polyphaga2 mimivirus complexed with tyrosynol
113	c3focB	Alignment	not modelled	96.4	17	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase from giardia lamblia
114	c1x8xA	Alignment	not modelled	96.4	20	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: tyrosyl t-rna synthetase from e.coli complexed with tyrosine
115	c6n0wA	Alignment	not modelled	96.3	24	PDB header: ligase Chain: A: PDB Molecule: tyrosine--trna ligase; PDBTitle: crystal structure of a tyrosine--trna ligase from elizabethkingia2 anophelis
116	c2e17A	Alignment	not modelled	96.2	22	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from thermus2 thermophilus
117	c2g36A	Alignment	not modelled	96.1	25	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase (ec 6.1.1.2)2 (tryptophan-trna ligase)(trprs) (tm0492) from thermotoga maritima at3 2.50 a resolution
118	c4j75B	Alignment	not modelled	95.7	11	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of a parasite trna synthetase, product-bound
119	c3kt3D	Alignment	not modelled	95.7	16	PDB header: ligase Chain: D: PDB Molecule: tryptophanyl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of s. cerevisiae tryptophanyl-trna synthetase in2 complex with trpamp
120	c2dlcX	Alignment	not modelled	95.6	21	PDB header: ligase/trna Chain: X: PDB Molecule: tyrosyl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of the ternary complex of yeast tyrosyl-trna2 synthetase