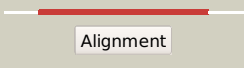

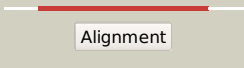
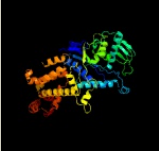
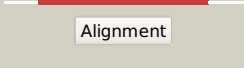

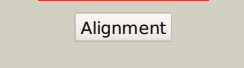

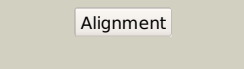
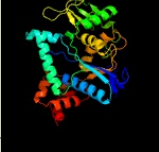
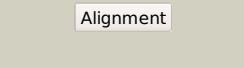

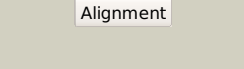

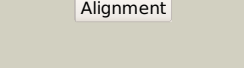

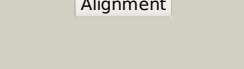

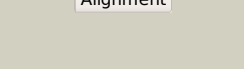

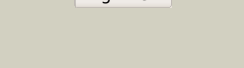


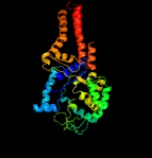









Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD3580c_(cysS)_4022573_4023982
Date	Fri Aug 9 18:20:26 BST 2019
Unique Job ID	c157f525de3b8ec6

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1u0bB_	 Alignment		100.0	41	PDB header: ligase/rna Chain: B: PDB Molecule: cysteinyI trna; PDBTitle: crystal structure of cysteinyI-trna synthetase binary2 complex with trnacys
2	c3sp1B_	 Alignment		100.0	29	PDB header: ligase Chain: B: PDB Molecule: cysteinyI-trna synthetase; PDBTitle: crystal structure of cysteinyI-trna synthetase (cysS) from borrelia2 burgdorferi
3	c3c8zB_	 Alignment		100.0	34	PDB header: ligase Chain: B: PDB Molecule: cysteinyI-trna synthetase; PDBTitle: the 1.6 a crystal structure of mshc: the rate limiting2 enzyme in the mycothiol biosynthetic pathway
4	c3tqoA_	 Alignment		100.0	42	PDB header: ligase Chain: A: PDB Molecule: cysteinyI-trna synthetase; PDBTitle: structure of the cysteinyI-trna synthetase (cysS) from coxiella2 burnetii.
5	d1li5a2	 Alignment		100.0	49	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
6	c5gl7A_	 Alignment		100.0	16	PDB header: ligase Chain: A: PDB Molecule: methionine--trna ligase, cytoplasmic; PDBTitle: crystal structure of a truncated human cytosolic methionyl-trna2 synthetase
7	c2ct8A_	 Alignment		100.0	23	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
8	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
9	c1woyA_	 Alignment		100.0	26	PDB header: ligase Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: crystal structure of methionyl trna synthetase y225f mutant2 from thermus thermophilus
10	c1pfuA_	 Alignment		100.0	18	PDB header: ligase Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: methionyl-trna synthetase from escherichia coli complexed2 with methionine phosphinate
11	c1rqgA_	 Alignment		100.0	21	PDB header: ligase Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: methionyl-trna synthetase from pyrococcus abyssi

12	c3kflA_	Alignment		100.0	20	PDB header: ligase Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: leishmania major methionyl-trna synthetase in complex with2 methionyladenylate and pyrophosphate
13	c4dlpB_	Alignment		100.0	22	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
14	c2x1lC_	Alignment		100.0	24	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
15	c3tunA_	Alignment		100.0	19	PDB header: ligase/ligase inhibitor Chain: A: PDB Molecule: methionyl-trna synthetase; PDBTitle: trypanosoma brucei methionyl-trna synthetase in complex with inhibitor2 chem 1356
16	c5urbB_	Alignment		100.0	19	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
17	c4dlpA_	Alignment		100.0	23	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
18	c3fnrA_	Alignment		100.0	20	PDB header: transferase Chain: A: PDB Molecule: arginyl-trna synthetase; PDBTitle: crystal structure of putative arginyl t-rna synthetase from2 campylobacter jejuni;
19	c3ziuB_	Alignment		100.0	18	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
20	c3ziuA_	Alignment		100.0	16	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
21	d1rqga2	Alignment	not modelled	100.0	20	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
22	c6ao8A_	Alignment	not modelled	100.0	20	PDB header: ligase Chain: A: PDB Molecule: arginine--trna ligase; PDBTitle: crystal structure of arginyl-trna synthetase from neisseria2 gonorrhoeae in complex with arginine
23	d2d5ba2	Alignment	not modelled	100.0	26	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
24	d1pfva2	Alignment	not modelled	100.0	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
25	c5xgqB_	Alignment	not modelled	100.0	21	PDB header: ligase Chain: B: PDB Molecule: methionine-trna ligase; PDBTitle: crystal structure of apo form (free-state) mycobacterium tuberculosis2 methionyl-trna synthetase
26	c4obyA_	Alignment	not modelled	100.0	15	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
27	d1ffya3	Alignment	not modelled	100.0	22	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
28	c5jldA_	Alignment	not modelled	100.0	9	PDB header: ligase Chain: A: PDB Molecule: arginyl-trna synthetase, putative; PDBTitle: crystal structure of arginyl-trna synthetase from plasmodium2 falciparum (pfrrs)
						Fold: Adenine nucleotide alpha hydrolase-like

29	d1ilea3	Alignment	not modelled	100.0	23	Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
30	d1ivsa4	Alignment	not modelled	100.0	19	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
31	c2zufA	Alignment	not modelled	100.0	15	PDB header: ligase/rna Chain: A: PDB Molecule: arginyl-trna synthetase; PDBTitle: crystal structure of pyrococcus horikoshii arginyl-trna2 synthetase complexed with trna(arg)
32	d1lrx2	Alignment	not modelled	100.0	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
33	c1gaxB	Alignment	not modelled	100.0	19	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
34	d1h3na3	Alignment	not modelled	100.0	21	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
35	c5ah5B	Alignment	not modelled	100.0	21	PDB header: ligase/rna Chain: B: PDB Molecule: leucine--trna ligase; PDBTitle: crystal structure of the ternary complex of agrobacterium2 radiobacter k84 agnb2 leuvs-trna-leuams
36	c1f7uA	Alignment	not modelled	100.0	16	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
37	c4r3zB	Alignment	not modelled	100.0	18	PDB header: protein binding/ligase Chain: B: PDB Molecule: arginine--trna ligase, cytoplasmic; PDBTitle: crystal structure of human argrs-glhrs-aimp1 complex
38	c1ileA	Alignment	not modelled	100.0	23	PDB header: aminoacyl-trna synthetase Chain: A: PDB Molecule: isoleucyl-trna synthetase; PDBTitle: isoleucyl-trna synthetase
39	c1iq0A	Alignment	not modelled	100.0	16	PDB header: ligase Chain: A: PDB Molecule: arginyl-trna synthetase; PDBTitle: thermus thermophilus arginyl-trna synthetase
40	c1qu2A	Alignment	not modelled	100.0	21	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
41	c1wz2B	Alignment	not modelled	100.0	19	PDB header: ligase/rna Chain: B: PDB Molecule: leucyl-trna synthetase; PDBTitle: the crystal structure of leucyl-trna synthetase and trna(leucine)2 complex
42	c1wkbA	Alignment	not modelled	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
43	c4ariA	Alignment	not modelled	100.0	22	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
44	d1f7ua2	Alignment	not modelled	100.0	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
45	c4q2tB	Alignment	not modelled	100.0	18	PDB header: ligase Chain: B: PDB Molecule: arginine--trna ligase, cytoplasmic; PDBTitle: crystal structure of arginyl-trna synthetase complexed with l-arginine
46	c1obhA	Alignment	not modelled	100.0	24	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
47	c2bytD	Alignment	not modelled	100.0	20	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
48	c6q8aA	Alignment	not modelled	100.0	24	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
49	c1g59A	Alignment	not modelled	100.0	17	PDB header: ligase/rna Chain: A: PDB Molecule: glutamyl-trna synthetase; PDBTitle: glutamyl-trna synthetase complexed with trna(glu).
50	d1iq0a2	Alignment	not modelled	100.0	17	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
51	c1lrxA	Alignment	not modelled	100.0	14	PDB header: ligase Chain: A: PDB Molecule: lysyl-trna synthetase; PDBTitle: crystal structure of class i lysyl-trna synthetase
52	d1qtra2	Alignment	not modelled	100.0	13	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
53	c5h4vE	Alignment	not modelled	100.0	16	PDB header: ligase Chain: E: PDB Molecule: glutamate--trna ligase; PDBTitle: structure of glutamyl-trna synthetase (xoo1504) from xanthomonas2 oryzae pv. oryzae
54	c6b1pA	Alignment	not modelled	100.0	18	PDB header: ligase Chain: A: PDB Molecule: glutamate--trna ligase 1; PDBTitle: crystal structure of glutamate-trna synthetase from helicobacter2 pylori
						PDB header: ligase Chain: A: PDB Molecule: glutamyl-trna synthetase 2;

55	c3afhA	Alignment	not modelled	100.0	14	PDBTitle: crystal structure of thermotoga maritima nondiscriminating glutamyl-tRNA synthetase in complex with a glutamyl-amp analog
56	c2cfoA	Alignment	not modelled	100.0	14	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: non-discriminating glutamyl-tRNA synthetase from <i>Thermosynechococcus elongatus</i> in complex with glu
57	c2ja2A	Alignment	not modelled	100.0	18	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: mycobacterium tuberculosis glutamyl-tRNA synthetase
58	c5tgtA	Alignment	not modelled	100.0	16	PDB header: ligase Chain: A: PDB Molecule: glutamate-tRNA ligase; PDBTitle: crystal structure of glutamyl-tRNA synthetase glurs from <i>Pseudomonas aeruginosa</i>
59	c2o5rA	Alignment	not modelled	100.0	21	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 <i>Thermotoga maritima</i> at 2.5 Å resolution
60	c4griB	Alignment	not modelled	99.9	13	PDB header: ligase Chain: B: PDB Molecule: glutamate-tRNA ligase; PDBTitle: crystal structure of a glutamyl-tRNA synthetase glurs from <i>Borrelia burgdorferi</i> bound to glutamic acid and zinc
61	c6b1zA	Alignment	not modelled	99.9	15	PDB header: ligase Chain: A: PDB Molecule: glutamate-tRNA ligase; PDBTitle: crystal structure of glutamate-tRNA synthetase from <i>Elizabethkingia anophelis</i>
62	c1exdA	Alignment	not modelled	99.9	14	PDB header: ligase/rna Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: crystal structure of a tight-binding glutamine tRNA bound to glutamine aminoacyl tRNA synthetase
63	d1u0bb1	Alignment	not modelled	99.9	28	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
64	c3al0C	Alignment	not modelled	99.9	15	PDB header: ligase/rna Chain: C: PDB Molecule: glutamyl-tRNA (gln) amidotransferase subunit c, linker, PDBTitle: crystal structure of the glutamine transamidosome from <i>Thermotoga maritima</i> in the glutamylation state.
65	c2hz7A	Alignment	not modelled	99.9	18	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: crystal structure of the glutamyl-tRNA synthetase from <i>Deinococcus radiodurans</i>
66	c4p2bA	Alignment	not modelled	99.8	15	PDB header: ligase Chain: A: PDB Molecule: glutamine aminoacyl-tRNA synthetase; PDBTitle: crystal structure of the apo form of the glutamyl-tRNA synthetase 2 catalytic domain from <i>Toxoplasma gondii</i> .
67	c4g6zA	Alignment	not modelled	99.8	17	PDB header: ligase Chain: A: PDB Molecule: glutamate-tRNA ligase; PDBTitle: crystal structure of a glutamyl-tRNA synthetase glurs from <i>Burkholderia thailandensis</i> bound to L-glutamate
68	c5zdoA	Alignment	not modelled	99.7	17	PDB header: ligase Chain: A: PDB Molecule: glutamine-tRNA ligase; PDBTitle: crystal structure analysis of ttrqs in co-crystallised with atp
69	c5bnzA	Alignment	not modelled	99.7	16	PDB header: ligase Chain: A: PDB Molecule: glutamine-tRNA ligase; PDBTitle: crystal structure of glutamine-tRNA ligase /glutamyl-tRNA synthetase 2 (glurs) from <i>Pseudomonas aeruginosa</i>
70	c4r3zC	Alignment	not modelled	99.7	15	PDB header: protein binding/ligase Chain: C: PDB Molecule: glutamine-tRNA ligase; PDBTitle: crystal structure of human argRS-glnRS-aimp1 complex
71	c4h3sA	Alignment	not modelled	99.7	16	PDB header: ligase Chain: A: PDB Molecule: glutamine-tRNA ligase; PDBTitle: the structure of glutamyl-tRNA synthetase from <i>Saccharomyces cerevisiae</i>
72	c4ye6A	Alignment	not modelled	99.7	13	PDB header: ligase Chain: A: PDB Molecule: glutamine-tRNA ligase; PDBTitle: the crystal structure of the intact human glnRS
73	d1j09a2	Alignment	not modelled	99.6	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
74	d1nzja	Alignment	not modelled	99.6	14	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
75	c3aiiA	Alignment	not modelled	99.5	20	PDB header: ligase Chain: A: PDB Molecule: glutamyl-tRNA synthetase; PDBTitle: archaeal non-discriminating glutamyl-tRNA synthetase from <i>Methanothermobacter thermoautotrophicus</i>
76	c2cybA	Alignment	not modelled	99.2	19	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-tRNA synthetase; PDBTitle: crystal structure of tyrosyl-tRNA synthetase complexed with L-tyrosine from <i>Archaeoglobus fulgidus</i>
77	c6mtkA	Alignment	not modelled	98.9	17	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-tRNA synthetase; PDBTitle: crystal structure of tryptophanyl-tRNA synthetase from <i>Elizabethkingia anophelis</i> nuhp1
78	c1h3eA	Alignment	not modelled	98.8	22	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-tRNA synthetase; PDBTitle: tyrosyl-tRNA synthetase from <i>Thermophilus</i> complexed with wild-2 type tnatyr(gua) and with atp and tyrosinol
79	c6otjA	Alignment	not modelled	98.7	17	PDB header: ligase Chain: A: PDB Molecule: tyrosine-tRNA ligase; PDBTitle: crystal structure of tyrosyl-tRNA synthetase from <i>Neisseria gonorrhoeae</i> with bound L-tyr
						Fold: Adenine nucleotide alpha hydrolase-like

80	d1h3fa1	Alignment	not modelled	98.7	21	Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
81	c2el7A	Alignment	not modelled	98.7	16	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from thermus2 thermophilus
82	d1i6la	Alignment	not modelled	98.7	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
83	c2cyaA	Alignment	not modelled	98.6	17	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: crystal structure of tyrosyl-trna synthetase from aeropyrum pernix
84	c3vgjB	Alignment	not modelled	98.6	19	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
85	c3a05A	Alignment	not modelled	98.6	20	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
86	d1jila	Alignment	not modelled	98.6	18	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
87	c1jiiA	Alignment	not modelled	98.6	18	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: crystal structure of s. aureus tyrrs in complex with sb-219383
88	d1li5a1	Alignment	not modelled	98.6	27	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
89	c3m5wB	Alignment	not modelled	98.6	14	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from campylobacter2 jejuni
90	c3prhB	Alignment	not modelled	98.6	17	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase val144pro mutant from b. subtilis
91	c5tevA	Alignment	not modelled	98.6	17	PDB header: ligase Chain: A: PDB Molecule: tryptophan--trna ligase; PDBTitle: crystal structure of a tryptophanyl-trna synthetase from neisseria2 gonorrhoeae, apo
92	c2g36A	Alignment	not modelled	98.6	15	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
93	c3jxeB	Alignment	not modelled	98.6	13	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of pyrococcus horikoshii tryptophanyl-trna2 synthetase in complex with trpamp
94	c2j5bA	Alignment	not modelled	98.5	20	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: structure of the tyrosyl trna synthetase from acanthamoeba polyphaga2 mimivirus complexed with tyrosinol
95	c3hztD	Alignment	not modelled	98.5	13	PDB header: ligase Chain: D: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase homolog from entamoeba histolytica
96	c6ncrB	Alignment	not modelled	98.4	19	PDB header: ligase Chain: B: PDB Molecule: tryptophan--trna ligase; PDBTitle: crystal structure of tryptophan-trna ligase from chlamydia trachomatis2 with bound l-tryptophan
97	c5ekdA	Alignment	not modelled	98.4	13	PDB header: ligase/antibiotic Chain: A: PDB Molecule: tryptophan--trna ligase, mitochondrial; PDBTitle: human mitochondrial tryptophanyl-trna synthetase bound by indolmycin2 and mn*atp.
98	c2rkjM	Alignment	not modelled	98.4	19	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
99	c2yy5C	Alignment	not modelled	98.4	17	PDB header: ligase Chain: C: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from mycoplasma2 pneumoniae
100	c4j75B	Alignment	not modelled	98.4	13	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of a parasite trna synthetase, product-bound
101	c1yi8C	Alignment	not modelled	98.4	16	PDB header: ligase Chain: C: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl trna synthetase ii from deinococcus2 radiodurans in complex with l-trp
102	c3tzeA	Alignment	not modelled	98.4	16	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of a tryptophanyl-trna synthetase from2 encephalitozoon cuniculi bound to tryptophan
103	c1x8xA	Alignment	not modelled	98.3	16	PDB header: ligase Chain: A: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: tyrosyl t-rna synthetase from e.coli complexed with tyrosine
104	c6byqA	Alignment	not modelled	98.3	17	PDB header: ligase Chain: A: PDB Molecule: tyrosine--trna ligase; PDBTitle: crystal structure of tyrosine-trna ligase from helicobacter pylori g27
						PDB header: ligase

105	c2janD_	Alignment	not modelled	98.3	16	Chain: D: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: tyrosyl-trna synthetase from mycobacterium tuberculosis in2 unliganded state
106	c3kt3D_	Alignment	not modelled	98.3	14	PDB header: ligase Chain: D: PDB Molecule: tryptophanyl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of s. cerevisiae tryptophanyl-trna synthetase in2 complex with trpamp
107	c6n0wA_	Alignment	not modelled	98.2	16	PDB header: ligase Chain: A: PDB Molecule: tyrosine--trna ligase; PDBTitle: crystal structure of a tyrosine--trna ligase from elizabethkingia2 anophelis
108	c3n9iA_	Alignment	not modelled	98.2	16	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from yersinia pestis2 co92
109	d2ts1a_	Alignment	not modelled	98.1	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
110	c2ts1A_	Alignment	not modelled	98.1	16	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
111	c3p0jD_	Alignment	not modelled	98.1	18	PDB header: ligase Chain: D: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: leishmania major tyrosyl-trna synthetase in complex with tyrosinol,2 triclinic crystal form 1
112	c2dlcX_	Alignment	not modelled	98.1	15	PDB header: ligase/trna Chain: X: PDB Molecule: tyrosyl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of the ternary complex of yeast tyrosyl-trna2 synthetase
113	c3focB_	Alignment	not modelled	98.1	16	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: tryptophanyl-trna synthetase from giardia lamblia
114	c2cycB_	Alignment	not modelled	98.0	19	PDB header: ligase Chain: B: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: crystal structure of tyrosyl-trna synthetase complexed with l-tyrosine2 from pyrococcus horikoshii
115	c2quiB_	Alignment	not modelled	98.0	18	PDB header: ligase Chain: B: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structures of human tryptophanyl-trna synthetase in2 complex with tryptophanamide and atp
116	c3sz3A_	Alignment	not modelled	97.9	23	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of tryptophanyl-trna synthetase from vibrio cholerae2 with an endogenous tryptophan
117	c5ihxB_	Alignment	not modelled	97.9	13	PDB header: ligase Chain: B: PDB Molecule: tyrosine--trna ligase, mitochondrial; PDBTitle: crystal structure of a c-terminally truncated aspergillus nidulans2 mitochondrial tyrosyl-trna synthetase
118	d1jlua_	Alignment	not modelled	97.7	16	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain
119	c1r6tA_	Alignment	not modelled	97.6	17	PDB header: ligase Chain: A: PDB Molecule: tryptophanyl-trna synthetase; PDBTitle: crystal structure of human tryptophanyl-trna synthetase
120	d1n3la_	Alignment	not modelled	97.5	17	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidylyl transferase Family: Class I aminoacyl-tRNA synthetases (RS), catalytic domain