

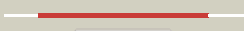





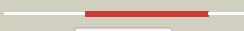


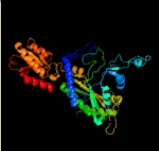





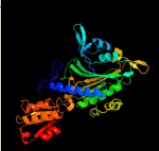















Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD2614c_(thrS)_2941199_2943277
Date	Wed Aug 7 12:50:25 BST 2019
Unique Job ID	7427b1bfd007456d

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1qf6A_	 Alignment		100.0	40	PDB header: ligase/rna Chain: A: PDB Molecule: threonyl-trna synthetase; PDBTitle: structure of e. coli threonyl-trna synthetase complexed with its2 cognate trna
2	c1nyqA_	 Alignment		100.0	42	PDB header: ligase Chain: A: PDB Molecule: threonyl-trna synthetase 1; PDBTitle: structure of staphylococcus aureus threonyl-trna synthetase2 complexed with an analogue of threonyl adenylate
3	c3a32A_	 Alignment		100.0	34	PDB header: ligase Chain: A: PDB Molecule: probable threonyl-trna synthetase 1; PDBTitle: crystal structure of putative threonyl-trna synthetase thrs-1 from2 aeropyrum pernix
4	c1fyfB_	 Alignment		100.0	42	PDB header: ligase Chain: B: PDB Molecule: threonyl-trna synthetase; PDBTitle: crystal structure of a truncated form of threonyl-trna2 synthetase complexed with a seryl adenylate analog
5	c4hwtA_	 Alignment		100.0	40	PDB header: ligase/ligase inhibitor Chain: A: PDB Molecule: threonine--trna ligase, cytoplasmic; PDBTitle: crystal structure of human threonyl-trna synthetase bound to a novel2 inhibitor
6	c5zy9D_	 Alignment		100.0	40	PDB header: ligase Chain: D: PDB Molecule: threonyl-trna synthase; PDBTitle: structural basis for a trna synthetase
7	c3ugtD_	 Alignment		100.0	35	PDB header: ligase Chain: D: PDB Molecule: threonyl-trna synthetase, mitochondrial; PDBTitle: crystal structure of the yeast mitochondrial threonyl-trna synthetase2 - orthorhombic crystal form
8	c5ucmB_	 Alignment		100.0	23	PDB header: ligase Chain: B: PDB Molecule: proline--trna ligase; PDBTitle: crystal structure of prolyl-trna synthetase from pseudomonas2 aeruginosa
9	c2i4IC_	 Alignment		100.0	23	PDB header: ligase Chain: C: PDB Molecule: proline-trna ligase; PDBTitle: rhodopseudomonas palustris prolyl-trna synthetase
10	d1nyra4	 Alignment		100.0	46	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
11	c5znlA_	 Alignment		100.0	21	PDB header: ligase Chain: A: PDB Molecule: proline--trna ligase; PDBTitle: crystal structure of a bacterial prors with ligands

12	c1ggmB_	Alignment		100.0	17	PDB header: ligase Chain: B: PDB Molecule: glycine--trna ligase; PDBTitle: glycyl-trna synthetase from thermus thermophilus complexed with2 glycyl-adenylate
13	c4hvcB_	Alignment		100.0	21	PDB header: ligase/ligase inhibitor Chain: B: PDB Molecule: bifunctional glutamate/proline--trna ligase; PDBTitle: crystal structure of human prolyl-trna synthetase in complex with2 halofuginone and atp analogue
14	c6nabB_	Alignment		100.0	20	PDB header: ligase Chain: B: PDB Molecule: prolyl-trna synthetase; PDBTitle: crystal structure of prolyl-trna synthetase from naegleria fowleri in2 complex with proline and adenosine monophosphate (amp)
15	c3w3sA_	Alignment		100.0	18	PDB header: ligase/rna Chain: A: PDB Molecule: type-2 serine--trna ligase; PDBTitle: crystal structure of a. aeolicus trnasec in complex with m. kandleri2 serrs
16	c6mn8A_	Alignment		100.0	18	PDB header: ligase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of prolyl-trna synthetase from onchocerca volvulus2 with bound halofuginone and nucleotide
17	c2j3mA_	Alignment		100.0	21	PDB header: ligase Chain: A: PDB Molecule: prolyl-trna synthetase; PDBTitle: prolyl-trna synthetase from enterococcus faecalis complexed2 with atp, manganese and prolinol
18	c5xiiC_	Alignment		100.0	19	PDB header: ligase Chain: C: PDB Molecule: prolyl-trna synthetase (prors); PDBTitle: crystal structure of toxoplasma gondii prolyl-trna synthetase (tgprs)2 in complex with inhibitor 6
19	c3ialB_	Alignment		100.0	23	PDB header: ligase Chain: B: PDB Molecule: prolyl-trna synthetase; PDBTitle: giardia lamblia prolyl-trna synthetase in complex with prolyl-2 adenylate
20	c1atiA_	Alignment		100.0	18	PDB header: protein biosynthesis Chain: A: PDB Molecule: glycyl-trna synthetase; PDBTitle: crystal structure of glycyl-trna synthetase from thermus thermophilus
21	c4twaA_	Alignment	not modelled	100.0	17	PDB header: ligase Chain: A: PDB Molecule: proline--trna ligase; PDBTitle: crystal structure of prolyl-trna synthetase (prs) from plasmodium2 falciparum
22	c1nj8C_	Alignment	not modelled	100.0	19	PDB header: ligase Chain: C: PDB Molecule: proline-trna synthetase; PDBTitle: crystal structure of prolyl-trna synthetase from2 methanocaldococcus janaschii
23	c5f9yB_	Alignment	not modelled	100.0	22	PDB header: ligase Chain: B: PDB Molecule: aminoacyl-trna synthetase; PDBTitle: crystal structure of prolyl-trna synthetase from cryptosporidium2 parvum complexed with l-proline and amp
24	d1qf6a4	Alignment	not modelled	100.0	47	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
25	c5e6mA_	Alignment	not modelled	100.0	20	PDB header: ligase/rna Chain: A: PDB Molecule: glycine--trna ligase; PDBTitle: crystal structure of human wild type glyrs bound with trnagly
26	c4kqeA_	Alignment	not modelled	100.0	21	PDB header: ligase Chain: A: PDB Molecule: glycine--trna ligase; PDBTitle: the mutant structure of the human glycyl-trna synthetase e71g
27	c1h4tD_	Alignment	not modelled	100.0	24	PDB header: aminoacyl-trna synthetase Chain: D: PDB Molecule: prolyl-trna synthetase; PDBTitle: prolyl-trna synthetase from thermus thermophilus complexed2 with l-proline
28	c5z5eB_	Alignment	not modelled	100.0	18	PDB header: ligase Chain: B: PDB Molecule: neq417; PDBTitle: crystal structure of the glycyl-trna synthetase (glyrs) in2 nanoarchaeum equitans

29	c4kr3A	Alignment	not modelled	100.0	19	PDB header: ligase/rna Chain: A: PDB Molecule: glycine--trna ligase; PDBTitle: glycyI-trna synthetase mutant e71g in complex with trna-gly
30	c1nj2A	Alignment	not modelled	100.0	23	PDB header: ligase Chain: A: PDB Molecule: proline-trna synthetase; PDBTitle: crystal structure of prolyl-trna synthetase from methanothermobacter2 thermotrophicus
31	c1g5hA	Alignment	not modelled	100.0	16	PDB header: dna binding protein Chain: A: PDB Molecule: mitochondrial dna polymerase accessory subunit; PDBTitle: crystal structure of the accessory subunit of murine mitochondrial2 polymerase gamma
32	c2pmfA	Alignment	not modelled	100.0	21	PDB header: ligase Chain: A: PDB Molecule: glycyl-trna synthetase; PDBTitle: the crystal structure of a human glycyl-trna synthetase mutant
33	c3iklA	Alignment	not modelled	100.0	15	PDB header: transferase Chain: A: PDB Molecule: dna polymerase subunit gamma-2, mitochondrial; PDBTitle: crystal structure of pol gb delta-i4.
34	c3ikmC	Alignment	not modelled	100.0	12	PDB header: transferase Chain: C: PDB Molecule: dna polymerase subunit gamma-2; PDBTitle: crystal structure of human mitochondrial dna polymerase holoenzyme
35	c5xilA	Alignment	not modelled	100.0	24	PDB header: ligase Chain: A: PDB Molecule: putative prolyl-trna synthetase; PDBTitle: crystal structure of leishmania major prolyl-trna synthetase (Imprs)
36	c2ei9B	Alignment	not modelled	100.0	16	PDB header: ligase Chain: B: PDB Molecule: histidyl-trna synthetase; PDBTitle: crystal structure of e.coli histidyl-trna synthetase2 complexed with a histidyl-adenylate analogue
37	c4v1ac	Alignment	not modelled	100.0	17	PDB header: ribosome Chain: C: PDB Molecule: PDBTitle: structure of the large subunit of the mammalian mitoribosome, part 22 of 2
38	c4ce4c	Alignment	not modelled	100.0	18	PDB header: ribosome Chain: C: PDB Molecule: PDBTitle: 39s large subunit of the porcine mitochondrial ribosome
39	c3netB	Alignment	not modelled	100.0	16	PDB header: ligase Chain: B: PDB Molecule: histidyl-trna synthetase; PDBTitle: crystal structure of histidyl-trna synthetase from nostoc sp. pcc 7120
40	c1adyA	Alignment	not modelled	100.0	19	PDB header: trna synthetase Chain: A: PDB Molecule: histidyl-trna synthetase; PDBTitle: histidyl-trna synthetase in complex with histidyl-adenylate
41	c5e3iA	Alignment	not modelled	100.0	16	PDB header: ligase Chain: A: PDB Molecule: histidine--trna ligase; PDBTitle: crystal structure of a histidyl-trna synthetase from acinetobacter2 baumannii with bound l-histidine and atp
42	c1qe0B	Alignment	not modelled	100.0	17	PDB header: ligase Chain: B: PDB Molecule: histidine--trna ligase; PDBTitle: crystal structure of apo s. aureus histidyl-trna synthetase
43	c3hriF	Alignment	not modelled	100.0	18	PDB header: ligase Chain: F: PDB Molecule: histidyl-trna synthetase; PDBTitle: histidyl-trna synthetase (apo) from trypanosoma brucei
44	c2cj9A	Alignment	not modelled	100.0	15	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase; PDBTitle: crystal structure of methanosarcina barkeri seryl-trna synthetase2 complexed with an analog of seryladenylate
45	c2dq0A	Alignment	not modelled	100.0	17	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase; PDBTitle: crystal structure of seryl-trna synthetase from pyrococcus2 horikoshii complexed with a seryl-adenylate analog
46	c1tkeA	Alignment	not modelled	100.0	37	PDB header: ligase Chain: A: PDB Molecule: threonyl-trna synthetase; PDBTitle: crystal structure of the editing domain of threonyl-trna2 synthetase complexed with serine
47	c1wu7A	Alignment	not modelled	100.0	18	PDB header: ligase Chain: A: PDB Molecule: histidyl-trna synthetase; PDBTitle: crystal structure of histidyl-trna synthetase from2 thermoplasma acidophilum
48	c6nhia	Alignment	not modelled	100.0	14	PDB header: ligase Chain: A: PDB Molecule: histidine--trna ligase; PDBTitle: crystal structure of histidine--trna ligase from elizabethkingia sp.2 ccug 26117
49	c3qo8A	Alignment	not modelled	100.0	16	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of seryl-trna synthetase from candida albicans
50	c4x5oB	Alignment	not modelled	100.0	15	PDB header: ligase Chain: B: PDB Molecule: histidine--trna ligase, cytoplasmic; PDBTitle: human histidine trna synthetase
51	c4e51B	Alignment	not modelled	100.0	17	PDB header: ligase Chain: B: PDB Molecule: histidine--trna ligase; PDBTitle: crystal structure of a histidyl-trna synthetase hisrs from2 burkholderia thailandensis bound to histidine
52	c1sryB	Alignment	not modelled	100.0	17	PDB header: ligase(synthetase) Chain: B: PDB Molecule: seryl-trna synthetase; PDBTitle: refined crystal structure of the seryl-trna synthetase from2 thermus thermophilus at 2.5 angstroms resolution
53	d1seta2	Alignment	not modelled	100.0	20	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
54	c2dq3A	Alignment	not modelled	100.0	21	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase; PDBTitle: crystal structure of aq_298

55	c6oteA	Alignment	not modelled	100.0	12	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of seryl-trna synthetase (serrs) from2 cryptosporidium parvum complexed with l-serylsulfamoyl adenosine
56	c1wleB	Alignment	not modelled	100.0	20	PDB header: ligase Chain: B: PDB Molecule: seryl-trna synthetase; PDBTitle: crystal structure of mammalian mitochondrial seryl-trna2 synthetase complexed with seryl-adenylate
57	c4g85A	Alignment	not modelled	100.0	18	PDB header: ligase Chain: A: PDB Molecule: histidine-trna ligase, cytoplasmic; PDBTitle: crystal structure of human hisrs
58	c6bljC	Alignment	not modelled	100.0	16	PDB header: ligase Chain: C: PDB Molecule: serine-trna ligase; PDBTitle: crystal structure of cytoplasmic serine-trna ligase from naegleria2 fowleri in complex with amp
59	c4g84B	Alignment	not modelled	100.0	17	PDB header: ligase Chain: B: PDB Molecule: histidine--trna ligase, cytoplasmic; PDBTitle: crystal structure of human hisrs
60	c3vbbB	Alignment	not modelled	100.0	16	PDB header: ligase Chain: B: PDB Molecule: seryl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of seryl-trna synthetase from human at 2.9 angstroms
61	c3lssA	Alignment	not modelled	100.0	17	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase; PDBTitle: trypanosoma brucei seryl-trna synthetase in complex with atp
62	c6h9xA	Alignment	not modelled	100.0	19	PDB header: ligase Chain: A: PDB Molecule: serine--trna ligase; PDBTitle: klebsiella pneumoniae seryl-trna synthetase in complex with the2 intermediate analog 5'-o-(n-(l-seryl)-sulfamoyl)adenosine
63	d1nj8a3	Alignment	not modelled	100.0	18	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
64	c3errB	Alignment	not modelled	100.0	21	PDB header: ligase Chain: B: PDB Molecule: fusion protein of microtubule binding domain from mouse PDBTitle: microtubule binding domain from mouse cytoplasmic dynein as a fusion2 with seryl-trna synthetase
65	c6girA	Alignment	not modelled	100.0	20	PDB header: cytosolic protein Chain: A: PDB Molecule: serine--trna ligase, cytoplasmic; PDBTitle: arabidopsis thaliana cytosolic seryl-trna synthetase
66	d1hc7a2	Alignment	not modelled	100.0	22	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
67	d1nj1a3	Alignment	not modelled	100.0	20	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
68	c5m8hB	Alignment	not modelled	100.0	15	PDB header: transferase Chain: B: PDB Molecule: atp phosphoribosyltransferase regulatory subunit; PDBTitle: atp phosphoribosyltransferase (hisz2 atpprt) from psychrobacter2 arcticus
69	d1nyra3	Alignment	not modelled	100.0	43	Fold: RRF/tRNA synthetase additional domain-like Superfamily: ThrRS/AlaRS common domain Family: Threonyl-tRNA synthetase (ThrRS), second 'additional' domain
70	c3od1A	Alignment	not modelled	100.0	14	PDB header: transferase Chain: A: PDB Molecule: atp phosphoribosyltransferase regulatory subunit; PDBTitle: the crystal structure of an atp phosphoribosyltransferase regulatory2 subunit/histidyl-trna synthetase from bacillus halodurans c
71	d1b76a2	Alignment	not modelled	100.0	16	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
72	d1atia2	Alignment	not modelled	100.0	16	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
73	d1tkea2	Alignment	not modelled	100.0	41	Fold: RRF/tRNA synthetase additional domain-like Superfamily: ThrRS/AlaRS common domain Family: Threonyl-tRNA synthetase (ThrRS), second 'additional' domain
74	c3mf2B	Alignment	not modelled	100.0	18	PDB header: ligase Chain: B: PDB Molecule: bll0957 protein; PDBTitle: crystal structure of class ii aaRS homologue (bll0957) complexed with2 amp
75	c6ezdD	Alignment	not modelled	100.0	20	PDB header: ligase Chain: D: PDB Molecule: pyrrolysyl-trna synthetase; PDBTitle: pyrrolysyl-trna synthetase from candidatus methanomethylophilus alvus2 (mmapylrs)
76	d1g5ha2	Alignment	not modelled	100.0	16	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
77	c3wqyB	Alignment	not modelled	100.0	20	PDB header: ligase/rna Chain: B: PDB Molecule: alanine--trna ligase; PDBTitle: crystal structure of archaeoglobus fulgidus alanyl-trna synthetase in2 complex with wild-type trna(ala) having g3.u70
78	c2ztgA	Alignment	not modelled	100.0	19	PDB header: ligase Chain: A: PDB Molecule: alanyl-trna synthetase; PDBTitle: crystal structure of archaeoglobus fulgidus alanyl-trna2 synthetase lacking the c-terminal dimerization domain in3 complex with ala-sa
79	d1wu7a2	Alignment	not modelled	100.0	19	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic

					domain
80	c2zzfA_	Alignment	not modelled	100.0	19 PDB header: ligase Chain: A: PDB Molecule: alanyl-trna synthetase; PDBTitle: crystal structure of alanyl-trna synthetase without oligomerization2 domain
81	d1kmma2	Alignment	not modelled	100.0	19 Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
82	c2zimA_	Alignment	not modelled	100.0	19 PDB header: ligase Chain: A: PDB Molecule: pyrrolysyl-trna synthetase; PDBTitle: pyrrolysyl-trna synthetase bound to adenylated pyrrolysine and2 pyrophosphate
83	d1z7ma1	Alignment	not modelled	100.0	15 Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
84	c2znjB_	Alignment	not modelled	100.0	20 PDB header: ligase Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of pyrrolysyl-trna synthetase from2 desulfitobacterium hafniense
85	d2g4ca2	Alignment	not modelled	100.0	13 Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
86	c1z7nB_	Alignment	not modelled	100.0	17 PDB header: transferase Chain: B: PDB Molecule: atp phosphoribosyltransferase regulatory subunit; PDBTitle: atp phosphoribosyl transferase (hiszg atp-ptase) from2 lactococcus lactis with bound prpp substrate
87	d1nyra1	Alignment	not modelled	100.0	33 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
88	c3racA_	Alignment	not modelled	100.0	19 PDB header: ligase Chain: A: PDB Molecule: histidine-trna ligase; PDBTitle: crystal structure of histidine--trna ligase subunit from2 alicyclobacillus acidocaldarius subsp. acidocaldarius dsm 446.
89	d1qf6a1	Alignment	not modelled	100.0	31 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
90	d1h4vb2	Alignment	not modelled	100.0	19 Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
91	c3kewA_	Alignment	not modelled	100.0	18 PDB header: transferase Chain: A: PDB Molecule: dhha1 domain protein; PDBTitle: crystal structure of probable alanyl-trna-synthase from clostridium2 perfringens
92	d1v4pa_	Alignment	not modelled	99.9	20 Fold: RRF/tRNA synthetase additional domain-like Superfamily: ThrRS/AlaRS common domain Family: AlaX-like
93	d1nj8a1	Alignment	not modelled	99.9	20 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
94	d1nj1a1	Alignment	not modelled	99.9	24 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
95	d1qe0a2	Alignment	not modelled	99.9	19 Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
96	d1hc7a1	Alignment	not modelled	99.9	19 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
97	d1g5ha1	Alignment	not modelled	99.9	19 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
98	c2e1bA_	Alignment	not modelled	99.9	19 PDB header: ligase, hydrolase Chain: A: PDB Molecule: 216aa long hypothetical alanyl-trna synthetase; PDBTitle: crystal structure of the alax-m trans-editing enzyme from2 pyrococcus horikoshii
99	d1atia1	Alignment	not modelled	99.9	19 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
100	d2g4ca1	Alignment	not modelled	99.9	15 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
101	d1usya_	Alignment	not modelled	99.9	12 Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
102	c2lw7A_	Alignment	not modelled	99.9	15 PDB header: ligase Chain: A: PDB Molecule: histidine--trna ligase, cytoplasmic; PDBTitle: nmr solution structure of human hisrs splice variant
103	d1wu7a1	Alignment	not modelled	99.9	18 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
104	d1kmma1	Alignment	not modelled	99.9	16 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
105	d1qe0a1	Alignment	not modelled	99.8	12 Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS

106	c3g1zB_	Alignment	not modelled	99.8	16	PDB header: ligase Chain: B: PDB Molecule: putative lysyl-trna synthetase; PDBTitle: structure of idp01693/yjea, a potential t-rna synthetase from2 salmonella typhimurium
107	d1h4vb1	Alignment	not modelled	99.8	19	Fold: Anticodon-binding domain-like Superfamily: Class II aaRS ABD-related Family: Anticodon-binding domain of Class II aaRS
108	d1e1oa2	Alignment	not modelled	99.8	17	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
109	d1bbua2	Alignment	not modelled	99.8	17	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
110	d2e1ba2	Alignment	not modelled	99.8	19	Fold: RRF/tRNA synthetase additional domain-like Superfamily: ThrRS/AlaRS common domain Family: AlaX-like
111	c1b70A_	Alignment	not modelled	99.7	17	PDB header: ligase Chain: A: PDB Molecule: phenylalanyl-trna synthetase; PDBTitle: phenylalanyl trna synthetase complexed with phenylalanine
112	d1jica_	Alignment	not modelled	99.7	17	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
113	d1nnha_	Alignment	not modelled	99.6	15	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
114	c3l4gl_	Alignment	not modelled	99.6	15	PDB header: ligase Chain: I: PDB Molecule: phenylalanyl-trna synthetase alpha chain; PDBTitle: crystal structure of homo sapiens cytoplasmic phenylalanyl-trna2 synthetase
115	d1eova2	Alignment	not modelled	99.6	21	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
116	d1b8aa2	Alignment	not modelled	99.6	18	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
117	d1c0aa3	Alignment	not modelled	99.6	21	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
118	c1wwtA_	Alignment	not modelled	99.6	18	PDB header: ligase Chain: A: PDB Molecule: threonyl-trna synthetase, cytoplasmic; PDBTitle: solution structure of the tgs domain from human threonyl-2 trna synthetase
119	d1l0wa3	Alignment	not modelled	99.6	18	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
120	c2odrB_	Alignment	not modelled	99.5	16	PDB header: ligase Chain: B: PDB Molecule: phosphoseryl-trna synthetase; PDBTitle: methanococcus maripaludis phosphoseryl-trna synthetase