

SEQUENCE LISTING

<110> CHUGAI SEIYAKU KABUSHIKI KAISHA

<120> Mutated tRNA for codon expansion

<130> C1-A1833P

<150> JP 2018-243478

<151> 2018-12-26

<160> 203

<170> PatentIn version 3.5

<210> 1

<211> 76

<212> RNA

<213> Escherichia coli

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ccgcuaugcu ccacca 76

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<213> Escherichia coli

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ccgcuuagcu ccacca 76

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uccucccgga ugcacca 77

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 uccugucggg cgcgcca 77

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 uccugcaggg cgcgcca 77

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 cugcagggga cacca 75

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 ccagucagag gagcca 76

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ucccguccgu uccgcca 77

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ggaacgcgcc ucca 74

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uccggccccc gcaacca 77

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uccggccccc gcaacca 77

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cagguacccc agcca 75

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<213> Escherichia coli

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cucguacccc agcca 75

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ccccuagggg acgcca 76

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<211> 74

<212> RNA

<213> Escherichia coli

<400> 15

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cuucgcccgc ucca 74

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<211> 75

<212> RNA

<213> Escherichia coli

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ccgcugcccg cucca 75

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cucguuuccc gcucca 76

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 uccacucagg ccuacca 77

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cgguucaag ucccguccuc gguacca	87
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aguucaaguc ucgccucccg cacca	85
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cgguucaag ucccgcuccg gguacca	87
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gguucgaguc cggccuucgg cacca	85
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ccugcacgac ccacca	76

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 ucccgucgua gccacca 77

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 ccgaguccgg gcacca 76

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 uccucuauca ccgacca 77

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 uccucucgug ccgacca 77

<210> 31
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uccucucucg ccgacca	77
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ucccgggcag guucgacucc ugugaucuuc cgcca	95
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cagaguucga aucucugcgc uuccgcca	88
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ccggggguuc aaauccccc cuucuccgcca	90
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gcauccgggg uucgaaucc cgccucaccg cca	93

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<210> 39
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ccgguagucg gcacca 76

<210> 41

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cucuccgccc cugcca 76

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<211> 85

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<213> Escherichia coli

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gguucgaau cccccccac cacca 85

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<211> 85

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<213> Escherichia coli

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gguucgaau cccccccac cacca 85

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ccgucaucac ccacca 76

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 uccacucgga cgcacca 77

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<400> 46
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 uccaauugaa cgcacca 77

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 uacuccccgc ca 72

<210> 48
 <211> 72
 <212> RNA
 <213> Methanosarcina mazei

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<210> 49
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<223> n is a, c, g, or u

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<211> 77
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<213> Escherichia coli

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<220>
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<223> n is a, c, g, or u

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uccccuauca cccgcca                                                              77

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<400> 51

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Val Ala Phe Ser Gly Gly Leu Asp Ser Thr Val Leu Leu His Gln Leu
          20           25          30

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Val Gln Trp Arg Thr Glu Asn Pro Gly Val Ala Leu Arg Ala Ile His
          35           40          45

```

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Val His His Gly Leu Ser Ala Asn Ala Asp Ala Trp Val Thr His Cys
          50           55          60

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Glu Asn Val Cys Gln Gln Trp Gln Val Pro Leu Val Val Glu Arg Val
65 70 75 80

Gln Leu Ala Gln Glu Gly Leu Gly Ile Glu Ala Gln Ala Arg Gln Ala
85 90 95

Arg Tyr Gln Ala Phe Ala Arg Thr Leu Leu Pro Gly Glu Val Leu Val
100 105 110

Thr Ala Gln His Leu Asp Asp Gln Cys Glu Thr Phe Leu Leu Ala Leu
115 120 125

Lys Arg Gly Ser Gly Pro Ala Gly Leu Ser Ala Met Ala Glu Val Ser
130 135 140

Glu Phe Ala Gly Thr Arg Leu Ile Arg Pro Leu Leu Ala Arg Thr Arg
145 150 155 160

Gly Glu Leu Val Gln Trp Ala Arg Gln Tyr Asp Leu Arg Trp Ile Glu
165 170 175

Asp Glu Ser Asn Gln Asp Asp Ser Tyr Asp Arg Asn Phe Leu Arg Leu
180 185 190

Arg Val Val Pro Leu Leu Gln Gln Arg Trp Pro His Phe Ala Glu Ala
195 200 205

Thr Ala Arg Ser Ala Ala Leu Cys Ala Glu Gln Glu Ser Leu Leu Asp
210 215 220

Glu Leu Leu Ala Asp Asp Leu Ala His Cys Gln Ser Pro Gln Gly Thr
225 230 235 240

Leu Gln Ile Val Pro Met Leu Ala Met Ser Asp Ala Arg Arg Ala Ala
245 250 255

Ile Ile Arg Arg Trp Leu Ala Gly Gln Asn Ala Pro Met Pro Ser Arg
260 265 270

Asp Ala Leu Val Arg Ile Trp Gln Glu Val Ala Leu Ala Arg Glu Asp
275 280 285

Ala Ser Pro Cys Leu Arg Leu Gly Ala Phe Glu Ile Arg Arg Tyr Gln
290 295 300

Ser Gln Leu Trp Trp Ile Lys Ser Val Thr Gly Gln Ser Glu Asn Ile
305 310 315 320

Val Pro Trp Gln Thr Trp Leu Gln Pro Leu Glu Leu Pro Ala Gly Leu
325 330 335

Gly Ser Val Gln Leu Asn Ala Gly Gly Asp Ile Arg Pro Pro Arg Ala
340 345 350

Asp Glu Ala Val Ser Val Arg Phe Lys Ala Pro Gly Leu Leu His Ile
355 360 365

Val Gly Arg Asn Gly Gly Arg Lys Leu Lys Lys Ile Trp Gln Glu Leu
370 375 380

Gly Val Pro Pro Trp Leu Arg Asp Thr Thr Pro Leu Leu Phe Tyr Gly
385 390 395 400

Glu Thr Leu Ile Ala Ala Ala Gly Val Phe Val Thr Gln Glu Gly Val
405 410 415

Ala Glu Gly Glu Asn Gly Val Ser Phe Val Trp Gln Lys Thr Leu Ser
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<210> 52
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<212> PRT
<213> Methanosarcina acetivorans

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Val	Glu	Thr	Leu	Pro	Leu	Leu	Val	Arg	Leu	Asn	Pro	Thr	Ile	Pro	Tyr		
		35					40					45					
Lys	Thr	Arg	Gly	Asn	Ala	Ala	Ile	Ala	Leu	Lys	Leu	Lys	Thr	Asp	Cys		
	50					55					60						
Pro	Glu	Lys	Ile	Ile	Ala	His	Val	Thr	Ser	Arg	Ile	Glu	Glu	Phe	Ala		
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Arg	Met	Glu	Cys	Glu	Lys	Thr	Asn	Pro	Gly	Ala	Val	Phe	Ile	Gln	Glu		
				85					90					95			
Lys	Asp	Tyr	Arg	Ser	Leu	Lys	Pro	Ile	Leu	Leu	Ser	Phe	Leu	Glu	Lys		
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Ala	Val	Lys	Asp	Val	Ile	Glu	Ile	Glu	Thr	Ala	Lys	His	Leu	Ile	Ser		
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Glu	Leu	Gly	Ile	Ser	Ser	Lys	Ser	Phe	Lys	Asn	Gly	Arg	Gly	Leu	Ile		
	130					135					140						
Gly	Ala	Leu	Ala	Ala	Cys	Gly	Ala	Met	Leu	Asn	Pro	Glu	Lys	Trp	Asp		
145					150					155					160		
Cys	Thr	Phe	Glu	His	Leu	Ala	Tyr	Arg	Gln	Lys	Lys	Lys	Trp	Gly	Ser		
				165					170					175			
Pro	Arg	Asp	Val	Asn	Lys	Asp	Ser	Phe	Phe	Glu	Ala	Asp	Arg	Gln	Thr		
			180					185					190				
Tyr	Pro	Gly	Thr	Trp	Asp	Thr	Val	Asp	Leu	Ala	Asn	Arg	Leu	Val	Val		
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Cys Val Pro His Ser Ala Asp Pro Val Leu Phe Gly Ile Arg Gly Glu
 210 215 220

Ser Pro Glu Leu Val Ser Lys Ala Ala Ser Leu Ile Arg Ser Glu Pro
 225 230 235 240

Val Glu Arg Phe Ala Val Tyr Arg Thr Asn Gln Gly Thr Asp Met His
 245 250 255

Leu Leu Pro Ala Ala Ser Ile Ser Glu Ile Arg Asp Met His Ser Tyr
 260 265 270

Arg Phe Glu Gly Thr Val Ser Ala Val Pro Lys Thr Ile Glu Gly Gly
 275 280 285

His Val Ile Phe Ala Val Arg Asp Gly Lys Gly Asp Glu Ile Asp Cys
 290 295 300

Ala Ala Phe Glu Pro Thr Lys Asn Phe Arg Val Leu Ala Arg Arg Leu
 305 310 315 320

Leu Leu Gly Asp Gln Ile Phe Leu Ser Gly Ser Val Thr Ser Gly Thr
 325 330 335

Leu Asn Ile Glu Lys Met Gln Val Lys Glu Leu Val Leu Leu Tyr Arg
 340 345 350

Glu Glu Asn Pro Lys Cys Pro Glu Cys Gly Lys His Met Lys Ser Ala
 355 360 365

Gly Gln Gly Gln Gly Phe Arg Cys Lys Lys Cys Gly Thr Arg Ala Ser
 370 375 380

Ser Lys Ile Arg Cys Glu Ala Glu Arg Asp Leu Glu Pro Gly Leu Tyr
 385 390 395 400

Glu Val Pro Pro Cys Ala Arg Arg His Leu Ala Lys Pro Leu Ala Arg

405

410

415

Glu Arg Asp Gln Asn Ile Arg Ile His Pro Ser Arg
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<212> PRT
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<220>
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cccuagggg acgc 74

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 <223> LR-2

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 <223> n = lysidine (2-lysylcytidine)

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 <223> LR-3

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 <223> n = lysidine (2-lysylcytidine)

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<213> Artificial Sequence

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<223> FR-5

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<210> 63

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<223> LR-4

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60

cccuagggg acgc

74

<210> 64

<211> 95

<212> DNA

<213> Artificial Sequence

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<223> D-1

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ggcggtaaca ggggttcgaa tcccctaggg gacgc

95

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<211> 95

<212> DNA

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<223> D-2

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 <223> D-3

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<400> 74

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<400> 77

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<210> 93
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<220>
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<220>
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ccccuagggg acgcca 76

<210> 96

<211> 76

<212> RNA

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<223> AAtR-7

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<223> AAtR-8

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<223> n = lysidine (2-lysylcytidine)

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<210> 98

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<211> 76

<212> RNA

<213> Artificial Sequence

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<223> AAtR-10

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<220>
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<220>
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 <223> n = lysidine (2-lysylcytidine)

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<210> 102
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<220>
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<210> 103
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<220>
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<210> 104
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<220>
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<220>
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<210> 106
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<220>
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ccccuagggg acgcca 76

<210> 107

<211> 76

<212> RNA

<213> Artificial Sequence

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<223> AAtR-18

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<210> 108

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<212> DNA

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<223> D-14

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<210> 109

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<223> D-15

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<210> 110

<211> 97

<212> DNA

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<223> D-16

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<212> DNA

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<220>

<223> D-17

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<210> 112

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<212> DNA

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<223> D-18

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<210> 113

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<212> DNA

<213> Artificial Sequence

<220>

<223> D-19

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<210> 114
<211> 97
<212> DNA
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<220>
<223> D-20

<400> 114
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<210> 115
<211> 97
<212> DNA
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<220>
<223> D-21

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<210> 116
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<212> DNA
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<220>
<223> D-22

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<210> 117
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<212> DNA
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<220>
 <223> D-23

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<210> 118
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<220>
 <223> D-24

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<210> 119
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 <212> DNA
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<220>
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<220>
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gauugguuua gcuucg 76

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<220>
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gauugguuua gcuucg 76

<210> 123
<211> 76
<212> RNA
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<220>
<223> mR-4

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<210> 124
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<220>
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<400> 124
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<210> 125
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 <212> RNA
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<220>
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<400> 125
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<210> 126
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<220>
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<210> 127
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<220>
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<210> 128

<211> 76
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<220>
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gauugguuuaa gcuucg 76

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<220>
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gauucuauuaa gcuucg 76

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<220>
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gauucuauaa gcuucg 76

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<212> RNA
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<220>
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<210> 133
<211> 40
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<211> 75
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<223> LR-5

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<400> 136
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<220>
<223> LR-6

<220>
<221> misc_feature
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ccagucagag ccgc 74

<210> 138
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<213> Artificial Sequence

<220>
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<220>
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 <223> n = agmatidine (2-agmatinylcytidine)

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<210> 139
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<210> 140
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 <210> 142
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 <220>
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 <223> n = lysidine (2-lysylcytidine)

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 <210> 143
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 <220>
 <223> D-26

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 <211> 96
 <212> DNA
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 <220>
 <223> D-27

 <400> 144

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<213> Artificial Sequence

<220>

<223> D-28

<400> 145

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<210> 146

<211> 95

<212> DNA

<213> Artificial Sequence

<220>

<223> D-29

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<213> Artificial Sequence

<220>

<223> D-30

<400> 147

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<210> 148

<211> 95

<212> DNA

<213> Artificial Sequence

<220>

<223> D-31

<400> 148

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<211> 95

<212> DNA

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<220>

<223> D-32

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<210> 150

<211> 95

<212> DNA

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<223> D-33

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<210> 151

<211> 95

<212> DNA

<213> Artificial Sequence

<220>

<223> D-34

<400> 151

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ggcggtaaca ggggttcgaa tcccctaggg gacgc 95

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<220>
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ucccguccgu uccgc 75

<210> 155
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<210> 156
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 <212> RNA
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 <223> TR-17

<400> 156
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 ccagucagag ccgc 74

<210> 157
 <211> 74
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> TR-18

<400> 157
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 ccagucagag ccgc 74

<210> 158
 <211> 74
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> TR-19

<400> 158
 ggcucuguag uucagucggu agaacggcgg auucagguuc cguaugucac ugguucgagu 60
 ccagucagag ccgc 74

<210> 159
<211> 74
<212> RNA
<213> Artificial Sequence

<220>
<223> TR-20

<400> 159
gucccccucg ucuagaggcc caggacaccg ccuacgacg gcgguaacag ggguucgaau 60
ccccuagggg acgc 74

<210> 160
<211> 74
<212> RNA
<213> Artificial Sequence

<220>
<223> TR-21

<400> 160
gucccccucg ucuagaggcc caggacaccg ccuacgacg gcgguaacag ggguucgaau 60
ccccuagggg acgc 74

<210> 161
<211> 74
<212> RNA
<213> Artificial Sequence

<220>
<223> TR-22

<400> 161
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ccccuagggg acgc 74

<210> 162
<211> 74
<212> RNA
<213> Artificial Sequence

<220>
<223> TR-23

<400> 162
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 ccccuagggg acgc 74

<210> 163
 <211> 97
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> D-36

<400> 163
 ggcgtaatac gactcactat agggttaact ttaagaagga gatatacata tgacttttat 60
 tattggtttt cgtattattc cgattggta agcttcg 97

<210> 164
 <211> 97
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> D-37

<400> 164
 ggcgtaatac gactcactat agggttaact ttaagaagga gatatacata tgacttttat 60
 tattggtttt cgaattattc cgattggta agcttcg 97

<210> 165
 <211> 97
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> D-38

<400> 165
 ggcgtaatac gactcactat agggttaact ttaagaagga gatatacata tgacttttat 60
 tattggtttt cggattattc cgattggta agcttcg 97

<210> 166

<211> 97
<212> DNA
<213> Artificial Sequence

<220>
<223> D-39

<400> 166
ggcgtaatac gactcactat agggttaact ttaagaagga gatatacata tgacttttct 60
actaggtttt attctactac cgctaggtta agcttcg 97

<210> 167
<211> 97
<212> DNA
<213> Artificial Sequence

<220>
<223> D-40

<400> 167
ggcgtaatac gactcactat agggttaact ttaagaagga gatatacata tgacttttct 60
actaggtttt atactactac cgctaggtta agcttcg 97

<210> 168
<211> 97
<212> DNA
<213> Artificial Sequence

<220>
<223> D-41

<400> 168
ggcgtaatac gactcactat agggttaact ttaagaagga gatatacata tgacttttct 60
actaggtttt atgctactac cgctaggtta agcttcg 97

<210> 169
<211> 76
<212> RNA
<213> Artificial Sequence

<220>
<223> mR-13

<400> 169

ggguuaacuu uaagaaggag auauacauau gacuuuuuuu auugguuuuc guauuuuucc 60

gauugguuua gcuucg 76

<210> 170

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> mR-14

<400> 170

ggguuaacuu uaagaaggag auauacauau gacuuuuuuu auugguuuuc gaauuuuucc 60

gauugguuua gcuucg 76

<210> 171

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> mR-15

<400> 171

ggguuaacuu uaagaaggag auauacauau gacuuuuuuu auugguuuuc ggauuuuucc 60

gauugguuua gcuucg 76

<210> 172

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> mR-16

<400> 172

ggguuaacuu uaagaaggag auauacauau gacuuuuucua cuagguuuua uucuacuacc 60

gcuagguuua gcuucg 76

<210> 173

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> mR-17

<400> 173

ggguuaacuu uaagaaggag auauacauau gacuuuucua cuagguuuua uacuacuacc 60

gcuagguuaa gcuucg 76

<210> 174

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> mR-18

<400> 174

ggguuaacuu uaagaaggag auauacauau gacuuuucua cuagguuuua ugcuaacuacc 60

gcuagguuaa gcuucg 76

<210> 175

<211> 77

<212> RNA

<213> Artificial Sequence

<220>

<223> AAtR-19

<400> 175

ggagcggguag uucagucggu uagaauaccu gcuuaaggug cagggggucg cggguucgag 60

ucccguccgu uccgccca 77

<210> 176

<211> 77

<212> RNA

<213> Artificial Sequence

<220>

<223> AAtR-20

<400> 176

ggagcggguag uucagucggu uagaauaccu gcuuaaggug cagggggucg cggguucgag 60

ucccguccgu uccgcca 77

<210> 177
<211> 77
<212> RNA
<213> Artificial Sequence

<220>
<223> AAtR-21

<220>
<221> misc_feature
<222> (35)..(35)
<223> n = lysidine (2-lysylcytidine)

<400> 177
ggagcgguag uucagucggu uagaauaccu gcuunaggug cagggggucg cggguucgag 60

ucccguccgu uccgcca 77

<210> 178
<211> 77
<212> RNA
<213> Artificial Sequence

<220>
<223> AAtR-22

<400> 178
ggagcgguag uucagucggu uagaauaccu gcuucaggug cagggggucg cggguucgag 60

ucccguccgu uccgcca 77

<210> 179
<211> 76
<212> RNA
<213> Artificial Sequence

<220>
<223> AAtR-23

<400> 179
ggcucuguag uucagucggu agaacggcgg auuaagguuc cguaugucac ugguucgagu 60

ccagucagag ccgcca 76

<210> 180
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-24

 <400> 180
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 ccagucagag ccgcca 76

 <210> 181
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-25

 <220>
 <221> misc_feature
 <222> (34)..(34)
 <223> n = lysidine (2-lysylcytidine)

 <400> 181
 ggcucuguag uucagucggu agaacggcgg auunagguuc cguaugucac ugguucgagu 60

 ccagucagag ccgcca 76

 <210> 182
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-26

 <400> 182
 ggcucuguag uucagucggu agaacggcgg auucagguuc cguaugucac ugguucgagu 60

 ccagucagag ccgcca 76

 <210> 183

<211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-27

 <400> 183
 gucccccuccg ucuagaggcc caggacaccg cccuuagacg gcgguaacag gggguucgaau 60

 ccccuagggg acgcca 76

 <210> 184
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-28

 <220>
 <221> misc_feature
 <222> (35)..(35)
 <223> n = lysidine (2-lysylcytidine)

 <400> 184
 gucccccuccg ucuagaggcc caggacaccg cccunagacg gcgguaacag gggguucgaau 60

 ccccuagggg acgcca 76

 <210> 185
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-29

 <400> 185
 gucccccuccg ucuagaggcc caggacaccg cccuuagacg gcgguaacag gggguucgaau 60

 ccccuagggg acgcca 76

 <210> 186
 <211> 76
 <212> RNA

<213> Artificial Sequence

<220>

<223> AAtR-30

<220>

<221> misc_feature

<222> (35)..(35)

<223> n = lysidine (2-lysylcytidine)

<400> 186

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ccccuagggg acgcca 76

<210> 187

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> AAtR-31

<400> 187

guccccuucg ucuagaggcc caggacaccg ccuuagacg gcgguaacag ggguucgaau 60

ccccuagggg acgcca 76

<210> 188

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> AAtR-32

<220>

<221> misc_feature

<222> (35)..(35)

<223> n = lysidine (2-lysylcytidine)

<400> 188

guccccuucg ucuagaggcc caggacaccg ccunagacg gcgguaacag ggguucgaau 60

ccccuagggg acgcca 76

<210> 189
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-33

 <400> 189
 gucccccucg ucuagaggcc caggacaccg ccucgcgacg gcgguaacag ggguucgaau 60

 ccccuagggg acgcca 76

 <210> 190
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-34

 <220>
 <221> misc_feature
 <222> (35)..(35)
 <223> n = lysidine (2-lysylcytidine)

 <400> 190
 gucccccucg ucuagaggcc caggacaccg ccuncgcgacg gcgguaacag ggguucgaau 60

 ccccuagggg acgcca 76

 <210> 191
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-35

 <400> 191
 gucccccucg ucuagaggcc caggacaccg ccuuccgacg gcgguaacag ggguucgaau 60

 ccccuagggg acgcca 76

 <210> 192

<211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-36

 <400> 192
 gucccccucg ucuagaggcc caggacaccg ccuauuacg gcgguaacag ggguucgaau 60

 ccccuagggg acgcca 76

 <210> 193
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-37

 <220>
 <221> misc_feature
 <222> (35)..(35)
 <223> n = lysidine (2-lysylcytidine)

 <400> 193
 gucccccucg ucuagaggcc caggacaccg ccunauacg gcgguaacag ggguucgaau 60

 ccccuagggg acgcca 76

 <210> 194
 <211> 76
 <212> RNA
 <213> Artificial Sequence

 <220>
 <223> AAtR-38

 <400> 194
 gucccccucg ucuagaggcc caggacaccg ccucuuacg gcgguaacag ggguucgaau 60

 ccccuagggg acgcca 76

 <210> 195
 <211> 76
 <212> RNA

<213> Artificial Sequence

<220>

<223> AAtR-39

<400> 195

gucccccucg ucuagaggcc caggacaccg cccuuagacg gcgguaacag gggguucgaau 60

ccccuagggg acgcca 76

<210> 196

<211> 76

<212> RNA

<213> Artificial Sequence

<220>

<223> AAtR-40

<220>

<221> misc_feature

<222> (35)..(35)

<223> n = agmatidine (2-agmatinylcytidine)

<400> 196

gucccccucg ucuagaggcc caggacaccg cccunagacg gcgguaacag gggguucgaau 60

ccccuagggg acgcca 76

<210> 197

<211> 10

<212> RNA

<213> Artificial Sequence

<220>

<223> tRNA fragment

<220>

<221> misc_feature

<222> (5)..(5)

<223> n = lysidine (2-lysylcytidine)

<400> 197

cccunacacg 10

<210> 198

<211> 10
<212> RNA
<213> Artificial Sequence

<220>
<223> tRNA fragment

<400> 198
cccuuacacg 10

<210> 199
<211> 10
<212> RNA
<213> Artificial Sequence

<220>
<223> tRNA fragment

<220>
<221> misc_feature
<222> (5)..(5)
<223> n = lysidine (2-lysylcytidine)

<400> 199
cccunccacg 10

<210> 200
<211> 10
<212> RNA
<213> Artificial Sequence

<220>
<223> tRNA fragment

<400> 200
cccuuccacg 10

<210> 201
<211> 74
<212> RNA
<213> Artificial Sequence

<220>
<223> FR6 + FR7

<400> 201

ggagcgguag uucagucggu uagaauaccu gcuuaggugc agggggucgc ggguucgagu 60

cccguccguu ccgc 74

<210> 202
<211> 10
<212> RNA
<213> Artificial Sequence

<220>
<223> tRNA fragment

<220>
<221> misc_feature
<222> (5)..(5)
<223> n = lysidine (2-lysylcytidine)

<400> 202
cccunauacg 10

<210> 203
<211> 10
<212> RNA
<213> Artificial Sequence

<220>
<223> tRNA fragment

<400> 203
cccuuauacg 10