

10362W001_ST25
SEQUENCE LISTING

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<120> NON-HUMAN ANIMALS COMPRISING A HUMANIZED ASGR1 LOCUS

<130> 009108.362W01

<150> 62/525,524
<151> 2017-06-27

<160> 42

<170> PatentIn version 3.5

<210> 1
<211> 291
<212> PRT
<213> Homo sapiens

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<222> (1)..(40)
<223> Cytoplasmic Domain

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<223> Transmembrane Domain

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<222> (61)..(123)
<223> Coiled-Coil Domain

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<222> (161)..(278)
<223> C-Type Lectin Domain

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Met Thr Lys Glu Tyr Gln Asp Leu Gln His Leu Asp Asn Glu Glu Ser
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Asp His His Gln Leu Arg Lys Gly Pro Pro Pro Pro Gln Pro Leu Leu
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Gln Arg Leu Cys Ser Gly Pro Arg Leu Leu Leu Leu Ser Leu Gly Leu
35 40 45

Ser Leu Leu Leu Leu Val Val Val Cys Val Ile Gly Ser Gln Asn Ser
50 55 60

Gln Leu Gln Glu Glu Leu Arg Gly Leu Arg Glu Thr Phe Ser Asn Phe
65 70 75 80

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Thr Ala Ser Thr Glu Ala Gln Val Lys Gly Leu Ser Thr Gln Gly Gly
85 90 95

Asn Val Gly Arg Lys Met Lys Ser Leu Glu Ser Gln Leu Glu Lys Gln
100 105 110

Gln Lys Asp Leu Ser Glu Asp His Ser Ser Leu Leu Leu His Val Lys
115 120 125

Gln Phe Val Ser Asp Leu Arg Ser Leu Ser Cys Gln Met Ala Ala Leu
130 135 140

Gln Gly Asn Gly Ser Glu Arg Thr Cys Cys Pro Val Asn Trp Val Glu
145 150 155 160

His Glu Arg Ser Cys Tyr Trp Phe Ser Arg Ser Gly Lys Ala Trp Ala
165 170 175

Asp Ala Asp Asn Tyr Cys Arg Leu Glu Asp Ala His Leu Val Val Val
180 185 190

Thr Ser Trp Glu Glu Gln Lys Phe Val Gln His His Ile Gly Pro Val
195 200 205

Asn Thr Trp Met Gly Leu His Asp Gln Asn Gly Pro Trp Lys Trp Val
210 215 220

Asp Gly Thr Asp Tyr Glu Thr Gly Phe Lys Asn Trp Arg Pro Glu Gln
225 230 235 240

Pro Asp Asp Trp Tyr Gly His Gly Leu Gly Gly Gly Glu Asp Cys Ala
245 250 255

His Phe Thr Asp Asp Gly Arg Trp Asn Asp Asp Val Cys Gln Arg Pro
260 265 270

Tyr Arg Trp Val Cys Glu Thr Glu Leu Asp Lys Ala Ser Gln Glu Pro
275 280 285

Pro Leu Leu
290

<210> 2
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<212> PRT
<213> Mus musculus

<220>
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 <223> Transmembrane Domain

<220>
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 <223> Coiled-Coil Domain

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 <222> (160)..(277)
 <223> C-Type Lectin Domain

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His His Gln Leu Arg Arg Gly Pro Pro Pro Thr Pro Arg Leu Leu Gln
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Arg Leu Cys Ser Gly Ser Arg Leu Leu Leu Leu Ser Ser Ser Leu Ser
 35 40 45

Ile Leu Leu Leu Val Val Val Cys Val Ile Thr Ser Gln Asn Ser Gln
 50 55 60

Leu Arg Glu Asp Leu Leu Ala Leu Arg Gln Asn Phe Ser Asn Leu Thr
 65 70 75 80

Val Ser Thr Glu Asp Gln Val Lys Ala Leu Ser Thr Gln Gly Ser Ser
 85 90 95

Val Gly Arg Lys Met Lys Leu Val Glu Ser Lys Leu Glu Lys Gln Gln
 100 105 110

Lys Asp Leu Thr Glu Asp His Ser Ser Leu Leu Leu His Val Lys Gln
 115 120 125

Leu Val Ser Asp Val Arg Ser Leu Ser Cys Gln Met Ala Ala Phe Arg
 130 135 140

Gly Asn Gly Ser Glu Arg Thr Cys Cys Pro Ile Asn Trp Val Glu Tyr
 145 150 155 160

Glu Gly Ser Cys Tyr Trp Phe Ser Ser Ser Val Arg Pro Trp Thr Glu
 165 170 175

Ala Asp Lys Tyr Cys Gln Leu Glu Asn Ala His Leu Val Val Val Thr
 180 185 190

Ser Arg Asp Glu Gln Asn Phe Leu Gln Arg His Met Gly Pro Leu Asn
 195 200 205

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Thr Trp Ile Gly Leu Thr Asp Gln Asn Gly Pro Trp Lys Trp Val Asp
210 215 220

Gly Thr Asp Tyr Glu Thr Gly Phe Gln Asn Trp Arg Pro Glu Gln Pro
225 230 235 240

Asp Asn Trp Tyr Gly His Gly Leu Gly Gly Gly Glu Asp Cys Ala His
245 250 255

Phe Thr Thr Asp Gly Arg Trp Asn Asp Asp Val Cys Arg Arg Pro Tyr
260 265 270

Arg Trp Val Cys Glu Thr Lys Leu Asp Lys Ala Asn
275 280

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<222> (62)..(290)
<223> Residues Encoded by Introduced Human Exons

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His His Gln Leu Arg Arg Gly Pro Pro Pro Thr Pro Arg Leu Leu Gln
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Arg Leu Cys Ser Gly Ser Arg Leu Leu Leu Leu Ser Ser Ser Leu Ser
35 40 45

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Ile Leu Leu Leu Val Val Val Cys Val Ile Thr Ser Gln Asn Ser Gln
50 55 60

Leu Gln Glu Glu Leu Arg Gly Leu Arg Glu Thr Phe Ser Asn Phe Thr
65 70 75 80

Ala Ser Thr Glu Ala Gln Val Lys Gly Leu Ser Thr Gln Gly Gly Asn
85 90 95

Val Gly Arg Lys Met Lys Ser Leu Glu Ser Gln Leu Glu Lys Gln Gln
100 105 110

Lys Asp Leu Ser Glu Asp His Ser Ser Leu Leu Leu His Val Lys Gln
115 120 125

Phe Val Ser Asp Leu Arg Ser Leu Ser Cys Gln Met Ala Ala Leu Gln
130 135 140

Gly Asn Gly Ser Glu Arg Thr Cys Cys Pro Val Asn Trp Val Glu His
145 150 155 160

Glu Arg Ser Cys Tyr Trp Phe Ser Arg Ser Gly Lys Ala Trp Ala Asp
165 170 175

Ala Asp Asn Tyr Cys Arg Leu Glu Asp Ala His Leu Val Val Val Thr
180 185 190

Ser Trp Glu Glu Gln Lys Phe Val Gln His His Ile Gly Pro Val Asn
195 200 205

Thr Trp Met Gly Leu His Asp Gln Asn Gly Pro Trp Lys Trp Val Asp
210 215 220

Gly Thr Asp Tyr Glu Thr Gly Phe Lys Asn Trp Arg Pro Glu Gln Pro
225 230 235 240

Asp Asp Trp Tyr Gly His Gly Leu Gly Gly Gly Glu Asp Cys Ala His
245 250 255

Phe Thr Asp Asp Gly Arg Trp Asn Asp Asp Val Cys Gln Arg Pro Tyr
260 265 270

Arg Trp Val Cys Glu Thr Glu Leu Asp Lys Ala Ser Gln Glu Pro Pro
275 280 285

Leu Leu
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<211> 855

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<212> DNA
 <213> Mus musculus

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 <213> Homo sapiens

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ctggacaagg ccagccagga gccacctctc ctttaa 876

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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 6
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<210> 7
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 7
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<210> 8
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 8
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<210> 9
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 <212> DNA
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<220>
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<400> 9
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<212>	DNA	
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<220>
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<400> 17
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<210> 18
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 <212> DNA
 <213> Artificial Sequence

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 <222> (1)..(60)
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<220>
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 <222> (61)..(120)
 <223> Human Sequence

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60

120

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 <212> DNA
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<220>
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<220>
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<220>
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 <223> Cassette

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ctcgagataa cttcgtataa tgtatgctat acgaagttat atgcatggcc tccgcgccgg 120
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<212> DNA
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<220>
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<220>
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<222> (1)..(60)
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<220>
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<222> (61)..(94)
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<222> (100)..(125)
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<222> (126)..(131)
<223> NheI

<220>
<221> misc_feature
<222> (132)..(191)
<223> Mouse Sequence

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ataaacttcgt ataatgtatg ctatacgaag ttatgctagt aactataacg gtcctaaggt 120
agcgagctag ccgtggacag atacagcaac gtgagctagt tattctgtcc taaagtctca 180
gttggaagat g 191

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<212> DNA
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 <223> Crei

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 <222> (9163)..(9188)
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 <222> (9195)..(9692)
 <223> Mouse Sequence

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aaataatatt	tttcctctac	agaagagatt	ggcaaactctg	acatctaaaa	t	4551

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 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 25

Glu	Gln	Lys	Leu	Ile	Ser	Glu	Glu	Asp	Leu
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<210> 26
 <211> 30
 <212> DNA
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 <223> Synthetic

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30

<210> 27
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 27

Ser Gln Asn Ser Gln Leu Gln Glu Glu Leu Arg Gly Leu Arg Glu Thr
 1 5 10 15

Phe Ser Asn Phe Thr Ala Ser Thr Glu Ala Gln Val Lys Gly Leu Ser
 20 25 30

Thr Gln Gly Gly Asn Val Gly Arg Lys Met Lys Ser Leu Glu Ser Gln
 35 40 45

Leu Glu Lys Gln Gln Lys Asp Leu Ser Glu Asp His Ser Ser Leu
 50 55 60

<210> 28
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 28

His Glu Arg Ser Cys Tyr Trp Phe Ser Arg Ser Gly Lys Ala Trp Ala
 1 5 10 15

Asp Ala Asp Asn Tyr Cys Arg Leu Glu Asp Ala His Leu Val Val Val
 20 25 30

Thr Ser Trp Glu Glu Gln Lys Phe Val Gln His His Ile Gly Pro Val
 35 40 45

Asn Thr Trp Met Gly Leu His Asp Gln Asn Gly Pro Trp Lys Trp Val
 50 55 60

Asp Gly Thr Asp Tyr Glu Thr Gly Phe Lys Asn Trp Arg Pro Glu Gln
 65 70 75 80

Pro Asp Asp Trp Tyr Gly His Gly Leu Gly Gly Gly Glu Asp Cys Ala
 85 90 95

His Phe Thr Asp Asp Gly Arg Trp Asn Asp Asp Val Cys Gln Arg Pro
 100 105 110

Tyr Arg Trp Val Cys Glu
115

<210> 29
<211> 39
<212> PRT
<213> Mus musculus

<400> 29

Met Thr Lys Asp Tyr Gln Asp Phe Gln His Leu Asp Asn Asp Asn Asp
1 5 10 15

His His Gln Leu Arg Arg Gly Pro Pro Thr Pro Arg Leu Leu Gln
20 25 30

Arg Leu Cys Ser Gly Ser Arg
35

<210> 30
<211> 21
<212> PRT
<213> Mus musculus

<400> 30

Leu Leu Leu Leu Ser Ser Ser Leu Ser Ile Leu Leu Leu Val Val Val
1 5 10 15

Cys Val Ile Thr Ser
20

<210> 31
<211> 229
<212> PRT
<213> Homo sapiens

<400> 31

Asn Ser Gln Leu Gln Glu Glu Leu Arg Gly Leu Arg Glu Thr Phe Ser
1 5 10 15

Asn Phe Thr Ala Ser Thr Glu Ala Gln Val Lys Gly Leu Ser Thr Gln
20 25 30

Gly Gly Asn Val Gly Arg Lys Met Lys Ser Leu Glu Ser Gln Leu Glu
35 40 45

Lys Gln Gln Lys Asp Leu Ser Glu Asp His Ser Ser Leu Leu Leu His
50 55 60

Val Lys Gln Phe Val Ser Asp Leu Arg Ser Leu Ser Cys Gln Met Ala
65 70 75 80

Ala Leu Gln Gly Asn Gly Ser Glu Arg Thr Cys Cys Pro Val Asn Trp
Page 22

Val Glu His Glu Arg Ser Cys Tyr Trp Phe Ser Arg Ser Gly Lys Ala
 100 105 110

Trp Ala Asp Ala Asp Asn Tyr Cys Arg Leu Glu Asp Ala His Leu Val
 115 120 125

Val Val Thr Ser Trp Glu Glu Gln Lys Phe Val Gln His His Ile Gly
 130 135 140

Pro Val Asn Thr Trp Met Gly Leu His Asp Gln Asn Gly Pro Trp Lys
 145 150 155 160

Trp Val Asp Gly Thr Asp Tyr Glu Thr Gly Phe Lys Asn Trp Arg Pro
 165 170 175

Glu Gln Pro Asp Asp Trp Tyr Gly His Gly Leu Gly Gly Gly Glu Asp
 180 185 190

Cys Ala His Phe Thr Asp Asp Gly Arg Trp Asn Asp Asp Val Cys Gln
 195 200 205

Arg Pro Tyr Arg Trp Val Cys Glu Thr Glu Leu Asp Lys Ala Ser Gln
 210 215 220

Glu Pro Pro Leu Leu
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<210> 32
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<220>
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<400> 32
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<220>
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<400> 33
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43

<210> 34
 <211> 43
 <212> DNA
 <213> Artificial Sequence

<220>
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 <400> 34
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<210> 35
 <211> 18
 <212> DNA
 <213> Artificial Sequence
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 <223> Synthetic
 <400> 35
 tccgcccgcgt gtttaaac 18

<210> 36
 <211> 21
 <212> DNA
 <213> Artificial Sequence
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 <223> Synthetic
 <400> 36
 ggaacccta gtgatggagt t 21

<210> 37
 <211> 16
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic
 <400> 37
 cggcctcagt gagcga 16

<210> 38
 <211> 21
 <212> DNA
 <213> Artificial Sequence
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 <223> Synthetic
 <400> 38
 cactccctct ctgcgcgctc g 21

<210> 39
 <211> 291
 <212> PRT
 <213> Macaca fascicularis
 <400> 39
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 1 5 10 15
 Asp His His Gln Leu Gly Lys Gly Pro Pro Pro Pro Gln Ser Leu Leu
 20 25 30

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Arg Arg Leu Cys Ser Gly Pro Arg Leu Leu Leu Leu Ser Leu Gly Leu
35 40 45

Ser Leu Leu Leu Leu Val Val Val Cys Val Ile Gly Ser Gln Asn Ala
50 55 60

Gln Leu Gln Arg Glu Leu Arg Gly Leu Arg Glu Thr Leu Ser Asn Phe
65 70 75 80

Thr Ala Ser Thr Glu Ala Gln Val Lys Gly Leu Ser Thr Gln Gly Gly
85 90 95

Asn Val Gly Arg Lys Met Lys Ser Leu Glu Ser Gln Leu Glu Lys Gln
100 105 110

Gln Lys Asp Leu Ser Glu Asp His Ser Ser Leu Leu Leu His Val Lys
115 120 125

Gln Phe Val Ser Asp Leu Arg Ser Leu Ser Cys Gln Met Ala Ala Leu
130 135 140

Gln Gly Asn Gly Ser Glu Arg Ala Cys Cys Pro Val Asn Trp Val Glu
145 150 155 160

His Glu Arg Ser Cys Tyr Trp Phe Ser Arg Ser Gly Lys Ala Trp Ala
165 170 175

Asp Ala Asp Asn Tyr Cys Arg Leu Glu Asp Ala His Leu Val Val Val
180 185 190

Thr Ser Trp Glu Glu Gln Lys Phe Val Gln His His Ile Gly Pro Val
195 200 205

Asn Thr Trp Met Gly Leu His Asp Gln Asn Gly Pro Trp Lys Trp Val
210 215 220

Asp Gly Thr Asp Tyr Glu Thr Gly Phe Lys Asn Trp Arg Pro Glu Gln
225 230 235 240

Pro Asp Asp Trp Tyr Gly His Gly Leu Gly Gly Gly Glu Asp Cys Ala
245 250 255

His Phe Thr Asp Asp Gly Arg Trp Asn Asp Asp Val Cys Gln Arg Pro
260 265 270

Tyr Arg Trp Val Cys Glu Thr Glu Leu Asp Lys Ala Ser Gln Glu Pro
275 280 285

Pro Leu Leu
290

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<210> 40
 <211> 876
 <212> DNA
 <213> *Macaca fascicularis*

<400> 40
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 ctctctctgc tctccctggg cctcagcctc ctgctgctgg tggttgtctg tgtgatcgga 180
 tcccaaaacg cccagctgca gcgggagctg cggggcctga gagagacgct cagcaacttc 240
 acagcgagca ccgaggccca ggtcaagggc ttgagcacc agggaggcaa tgtgggaaga 300
 aagatgaagt cgctggagtc ccagctggag aaacagcaga aggacttgag tgaagatcac 360
 tccagcctgc tgctccacgt gaagcagttc gtgtctgacc tgcggagcct gagctgtcag 420
 atggcggcgc tccagggcaa tggctcgga agggcctgct gccagtcaa ctgggtggag 480
 cacgagcgca gctgctactg gttctctcgc tccgggaagg cctgggccga cgccgacaac 540
 tactgccggc tggaggacgc gcacctggtg gtggtcacgt cctgggagga gcagaaattt 600
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 tggaagtggg tggacgggac ggactacgag acgggcttca agaactggag accggagcag 720
 ccggacgact ggtacggcca cgggctcggg ggaggggagg actgtgccca cttcaccgac 780
 gacggccgct ggaacgacga cgtctgccag aggccctacc gctgggtctg cgagacagag 840
 ctggacaagg ccagtcagga gccacctctc ctttaa 876

<210> 41
 <211> 284
 <212> PRT
 <213> *Rattus norvegicus*

<400> 41
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 1 5 10 15
 His His Gln Leu Gln Arg Gly Pro Pro Pro Ala Pro Arg Leu Leu Gln
 20 25 30
 Arg Leu Cys Ser Gly Phe Arg Leu Phe Leu Leu Ser Leu Gly Leu Ser
 35 40 45
 Ile Leu Leu Leu Val Val Val Cys Val Ile Thr Ser Gln Asn Ser Gln
 50 55 60
 Leu Arg Glu Asp Leu Arg Val Leu Arg Gln Asn Phe Ser Asn Phe Thr
 65 70 75 80
 Val Ser Thr Glu Asp Gln Val Lys Ala Leu Thr Thr Gln Gly Glu Arg
 85 90 95

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Val Gly Arg Lys₁₀₀ Met Lys Leu Val Glu₁₀₅ Ser Gln Leu Glu Lys₁₁₀ His Gln
 Glu Asp Leu₁₁₅ Arg Glu Asp His Ser₁₂₀ Arg Leu Leu Leu His₁₂₅ Val Lys Gln
 Leu Val₁₃₀ Ser Asp Val Arg Ser₁₃₅ Leu Ser Cys Gln Met₁₄₀ Ala Ala Leu Arg
 Gly Asn Gly Ser Glu Arg₁₅₀ Ile Cys Cys Pro Ile₁₅₅ Asn Trp Val Glu Tyr₁₆₀
 Glu Gly Ser Cys Tyr₁₆₅ Trp Phe Ser Ser Ser₁₇₀ Val Lys Pro Trp Thr₁₇₅ Glu
 Ala Asp Lys Tyr₁₈₀ Cys Gln Leu Glu Asn₁₈₅ Ala His Leu Val Val₁₉₀ Val Thr
 Ser Trp Glu₁₉₅ Glu Gln Arg Phe Val₂₀₀ Gln Gln His Met Gly₂₀₅ Pro Leu Asn
 Thr Trp₂₁₀ Ile Gly Leu Thr Asp₂₁₅ Gln Asn Gly Pro Trp₂₂₀ Lys Trp Val Asp
 Gly Thr Asp Tyr Glu Thr₂₃₀ Gly Phe Lys Asn Trp₂₃₅ Arg Pro Gly Gln Pro₂₄₀
 Asp Asp Trp Tyr Gly₂₄₅ His Gly Leu Gly Gly₂₅₀ Gly Glu Asp Cys Ala₂₅₅ His
 Phe Thr Thr Asp₂₆₀ Gly His Trp Asn Asp₂₆₅ Asp Val Cys Arg Arg₂₇₀ Pro Tyr
 Arg Trp Val₂₇₅ Cys Glu Thr Glu Leu₂₈₀ Gly Lys Ala Asn

<210> 42
 <211> 855
 <212> DNA
 <213> Rattus norvegicus

<400> 42
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 cagagagggc cacctccgc tccaaggctc ttgcagcgac tctgctctgg attccgtctc 120
 ttcctgcttt ccctgggcct cagcatcctg ctgctggtgg ttgtctgtgt gatcacatcc 180
 caaaattccc aactccggga agatctgcgg gttctaaggc agaatttcag caactttacc 240
 gtgagcactg aggaccaggt caaggccctg accaccagg gagagagagt gggaagaaag 300
 atgaagttag tcgagtcaca gctggaaaaa catcaggagg atctgaggga agaccactct 360

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agattgctac	tgcatgtaaa	gcagttagtg	tctgacgtgc	gaagcttgag	ctgccagatg	420
gccgcacttc	ggggcaatgg	ctctgaaagg	atctgctgcc	ccatcaactg	ggtggagtat	480
gaaggcagct	gctactgggt	ctccagctct	gtgaagcctt	ggacggaagc	tgacaagtac	540
tgccagctgg	agaacgcca	cctggtggtg	gtgacttcct	gggaggagca	gagattcgtc	600
cagcaacaca	tgggcccctt	aaatacttgg	attggcctaa	ctgaccagaa	cggaccctgg	660
aaatgggtgg	atgggacaga	ctatgagaca	ggcttcaaga	actggagacc	agggcagcca	720
gatgactggg	acggacatgg	gcttggaggg	ggtgaagact	gtgcccactt	caccaccgat	780
ggccactgga	atgatgacgt	ctgcaggagg	ccctaccgct	gggtctgtga	gacagagttg	840
ggcaaggcca	attag					855