

SEQUENCE LISTING

<110> Eli Lilly and Company

<120> PYY agonist

<130> X21917

<160> 15

<170> PatentIn version 3.5

<210> 1

<211> 36

<212> PRT

<213> Homo sapiens

<400> 1

Tyr Pro Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu
1 5 10 15

Leu Asn Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr
20 25 30

Arg Gln Arg Tyr
35

<210> 2

<211> 34

<212> PRT

<213> Homo sapiens

<400> 2

Ile Lys Pro Glu Ala Pro Gly Glu Asp Ala Ser Pro Glu Glu Leu Asn
1 5 10 15

Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Leu Val Thr Arg Gln
20 25 30

Arg Tyr

<210> 3

<211> 34

<212> PRT

<213> Artificial Sequence

<220>
 <223> Synthetic Construct

<220>
 <221> MISC_FEATURE
 <222> (5)..(5)
 <223> Xaa at position 5 is any amino acid with a functional group available for conjugation and the functional group is conjugated to a C16-C22 fatty acid

<220>
 <221> MISC_FEATURE
 <222> (7)..(7)
 <223> Xaa at position 7 is E or G

<220>
 <221> MISC_FEATURE
 <222> (8)..(8)
 <223> Xaa at position 8 is E or K

<220>
 <221> MISC_FEATURE
 <222> (15)..(15)
 <223> Xaa at position 15 is L or W

<220>
 <221> MISC_FEATURE
 <222> (16)..(16)
 <223> Xaa at position 16 is N or Q

<220>
 <221> MISC_FEATURE
 <222> (20)..(20)
 <223> Xaa at position 20 is A or I

<220>
 <221> MISC_FEATURE
 <222> (21)..(21)
 <223> Xaa at position 21 is E, D, or S

<220>
 <221> MISC_FEATURE
 <222> (28)..(28)
 <223> Xaa at position 28 is E or W

<400> 3

Pro Lys Pro Glu Xaa Pro Xaa Xaa Asp Ala Ser Pro Glu Glu Xaa Xaa
 1 5 10 15

Arg Tyr Tyr Xaa Xaa Leu Arg His Tyr Leu Asn Xaa Leu Thr Arg Gln

20

25

30

Arg Tyr

<210> 4

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 4

Pro	Lys	Pro	Glu	Lys	Pro	Gly	Glu	Asp	Ala	Ser	Pro	Glu	Glu	Trp	Gln
1				5					10					15	

Arg	Tyr	Tyr	Ala	Glu	Leu	Arg	His	Tyr	Leu	Asn	Trp	Leu	Thr	Arg	Gln
			20					25					30		

Arg Tyr

<210> 5

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 5

Pro	Lys	Pro	Glu	Lys	Pro	Gly	Glu	Asp	Ala	Ser	Pro	Glu	Glu	Trp	Gln
1				5					10					15	

Arg	Tyr	Tyr	Ala	Glu	Leu	Arg	His	Tyr	Leu	Asn	Glu	Leu	Thr	Arg	Gln
			20					25					30		

Arg Tyr

<210> 6

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 6

Pro	Lys	Pro	Glu	Lys	Pro	Glu	Glu	Asp	Ala	Ser	Pro	Glu	Glu	Trp	Gln
1				5					10					15	

Arg	Tyr	Tyr	Ile	Glu	Leu	Arg	His	Tyr	Leu	Asn	Trp	Leu	Thr	Arg	Gln
			20					25					30		

Arg Tyr

<210> 7

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 7

Pro	Lys	Pro	Glu	Lys	Pro	Gly	Lys	Asp	Ala	Ser	Pro	Glu	Glu	Trp	Asn
1				5					10					15	

Arg	Tyr	Tyr	Ala	Asp	Leu	Arg	His	Tyr	Leu	Asn	Trp	Leu	Thr	Arg	Gln
			20					25					30		

Arg Tyr

<210> 8

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 8

Pro	Lys	Pro	Glu	Lys	Pro	Gly	Glu	Asp	Ala	Ser	Pro	Glu	Glu	Leu	Gln
1				5					10					15	

Arg Tyr Tyr Ala Ser Leu Arg His Tyr Leu Asn Trp Leu Thr Arg Gln
 20 25 30

Arg Tyr

<210> 9
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<220>
 <221> MOD_RES
 <222> (5)..(5)
 <223> Lys at position 5 is chemically modified by conjugation of the
 epsilon-amino group of the Lys side chain with Ahx-glutamic
 acid-gamma glutamic acid-CO-(CH₂)₁₆-CO₂H

<220>
 <221> MOD_RES
 <222> (34)..(34)
 <223> AMIDATION

<400> 9

Pro Lys Pro Glu Lys Pro Gly Glu Asp Ala Ser Pro Glu Glu Trp Gln
 1 5 10 15

Arg Tyr Tyr Ala Glu Leu Arg His Tyr Leu Asn Trp Leu Thr Arg Gln
 20 25 30

Arg Tyr

<210> 10
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<220>

<221> MOD_RES
 <222> (5)..(5)
 <223> Lys at position 5 is chemically modified by conjugation of the
 epsilon-amino group of the Lys side chain with (AEEA)2-gamma
 glutamic acid-CO-(CH₂)₁₈-CO₂H

<220>
 <221> MOD_RES
 <222> (34)..(34)
 <223> AMIDATION

<400> 10

Pro	Lys	Pro	Glu	Lys	Pro	Gly	Glu	Asp	Ala	Ser	Pro	Glu	Glu	Trp	Gln
1				5					10					15	

Arg	Tyr	Tyr	Ala	Glu	Leu	Arg	His	Tyr	Leu	Asn	Glu	Leu	Thr	Arg	Gln
			20					25					30		

Arg Tyr

<210> 11
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<220>
 <221> MOD_RES
 <222> (5)..(5)
 <223> Lys at position 5 is chemically modified by conjugation of the
 epsilon-amino group of the Lys side chain with AEEA-gamma
 glutamic acid-CO-(CH₂)₁₆-CO₂H

<220>
 <221> MOD_RES
 <222> (34)..(34)
 <223> AMIDATION

<400> 11

Pro	Lys	Pro	Glu	Lys	Pro	Glu	Glu	Asp	Ala	Ser	Pro	Glu	Glu	Trp	Gln
1				5					10					15	

Arg	Tyr	Tyr	Ile	Glu	Leu	Arg	His	Tyr	Leu	Asn	Trp	Leu	Thr	Arg	Gln
			20					25					30		

Arg Tyr

<210> 12
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<220>
 <221> MOD_RES
 <222> (5)..(5)
 <223> Lys at position 5 is chemically modified by conjugation of the
 epsilon-amino group of the Lys side chain with (AEEA)2-gamma
 glutamic acid-CO-(CH₂)₁₆-CO₂H

<220>
 <221> MOD_RES
 <222> (34)..(34)
 <223> AMIDATION

<400> 12

Pro	Lys	Pro	Glu	Lys	Pro	Gly	Lys	Asp	Ala	Ser	Pro	Glu	Glu	Trp	Asn
1				5					10					15	

Arg	Tyr	Tyr	Ala	Asp	Leu	Arg	His	Tyr	Leu	Asn	Trp	Leu	Thr	Arg	Gln
			20					25					30		

Arg Tyr

<210> 13
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic Construct

<220>
 <221> MOD_RES
 <222> (5)..(5)
 <223> Lys at position 5 is chemically modified by conjugation of the

epsilon-amino group of the Lys side chain with (AEEA)2-(gamma glutamic acid)3-CO-C18-CO2H

<220>

<221> MOD_RES

<222> (34)..(34)

<223> AMIDATION

<400> 13

Pro	Lys	Pro	Glu	Lys	Pro	Gly	Glu	Asp	Ala	Ser	Pro	Glu	Glu	Leu	Gln
1				5					10					15	

Arg	Tyr	Tyr	Ala	Ser	Leu	Arg	His	Tyr	Leu	Asn	Trp	Leu	Thr	Arg	Gln
			20					25					30		

Arg Tyr

<210> 14

<211> 36

<212> PRT

<213> Homo sapiens

<400> 14

Ala	Pro	Leu	Glu	Pro	Val	Tyr	Pro	Gly	Asp	Asn	Ala	Thr	Pro	Glu	Gln
1				5					10					15	

Met	Ala	Gln	Tyr	Ala	Ala	Asp	Leu	Arg	Arg	Tyr	Ile	Asn	Met	Leu	Thr
			20					25					30		

Arg	Pro	Arg	Tyr
			35

<210> 15

<211> 274

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<400> 15

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Val	Ser	Ser	Tyr	Leu	Glu	Glu
1				5					10					15	

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly Gly
 20 25 30

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ser
 35 40 45

Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
 50 55 60

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
 65 70 75 80

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln
 85 90 95

Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val
 100 105 110

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr
 115 120 125

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
 130 135 140

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile
 145 150 155 160

Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
 165 170 175

Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser
 180 185 190

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
 195 200 205

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
 210 215 220

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val

225

230

235

240

Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met
245 250 255

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
260 265 270

Leu Gly