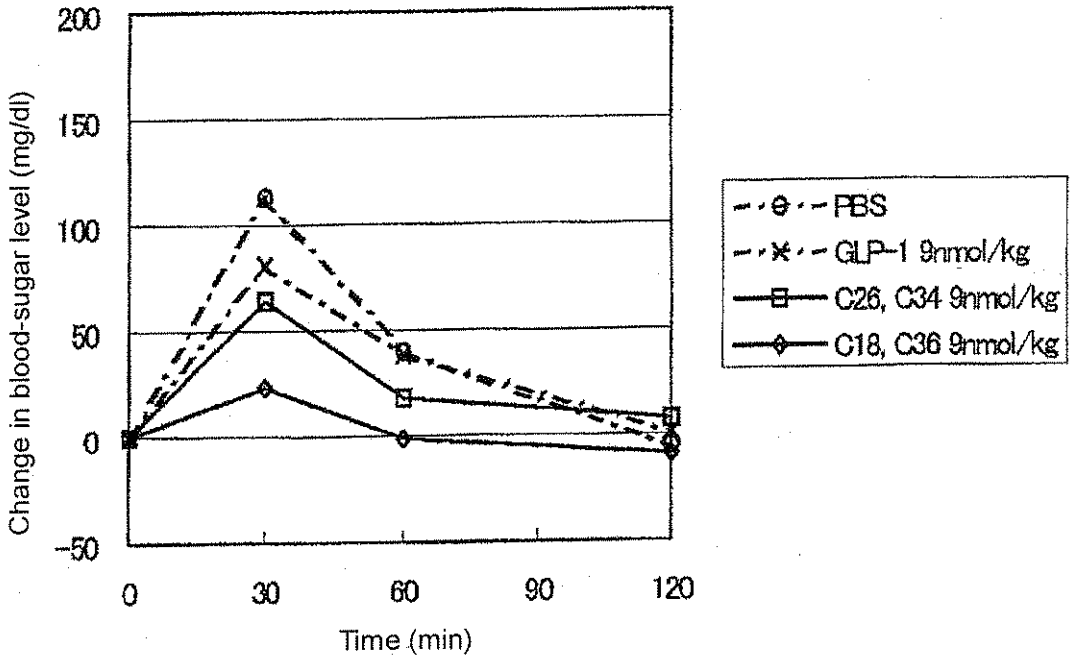
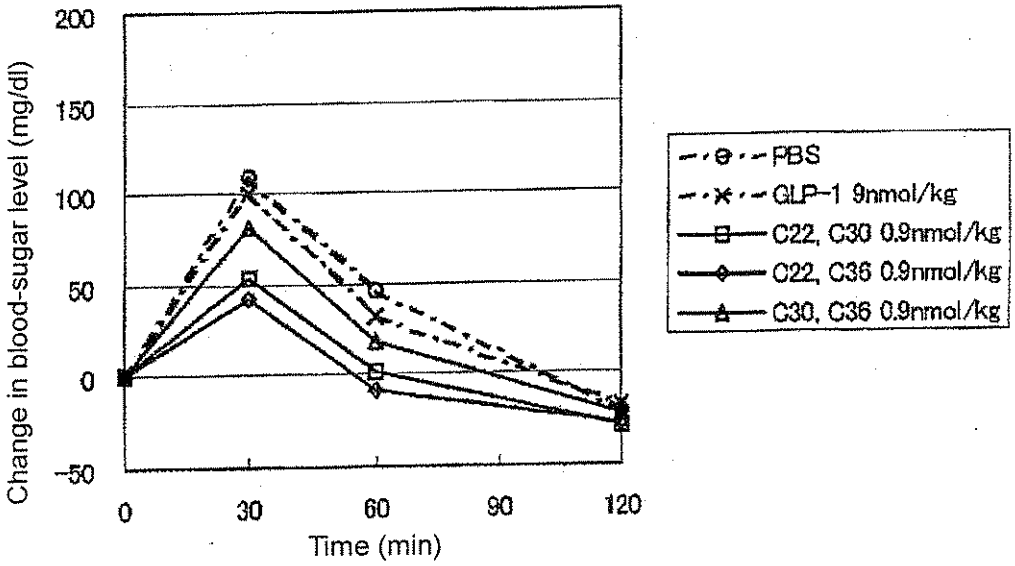
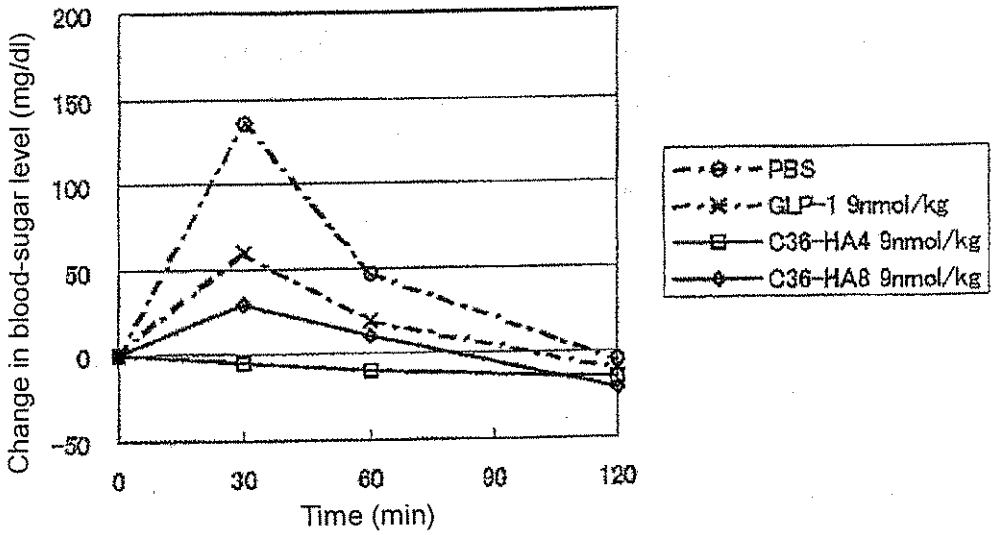
[FIG. 1]


200
150
100
50
0
-50
Change in blood-sugar level (mg/dl)
0
30
60
90
120
Time (min)
PBS
GLP-1 9nmol/kg
C26, C34 9nmol/kg
C18, C36 9nmol/kg

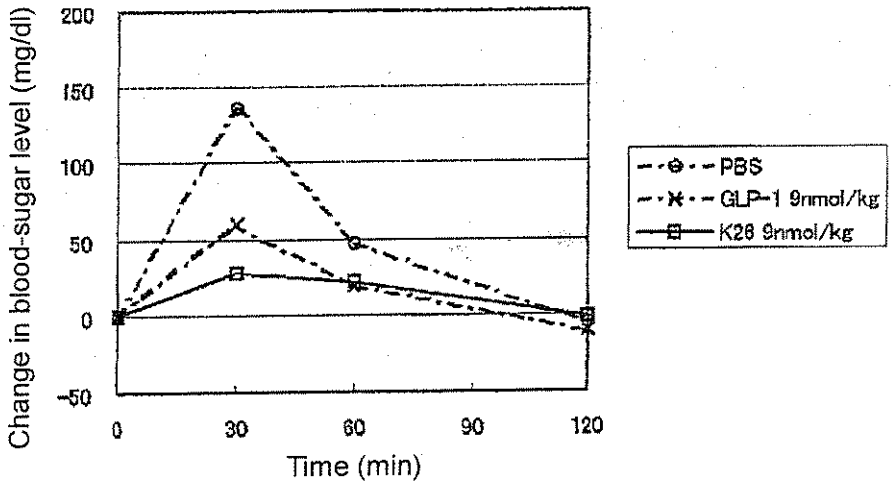
[FIG. 2]


200
150
100
50
0
-50
Change in blood-sugar level (mg/dl)
0
30
60
90
120
Time (min)
PBS
GLP-1 9nmol/kg
C22, C30 0.9nmol/kg
C22, C36 0.9nmol/kg
C30, C36 0.9nmol/kg

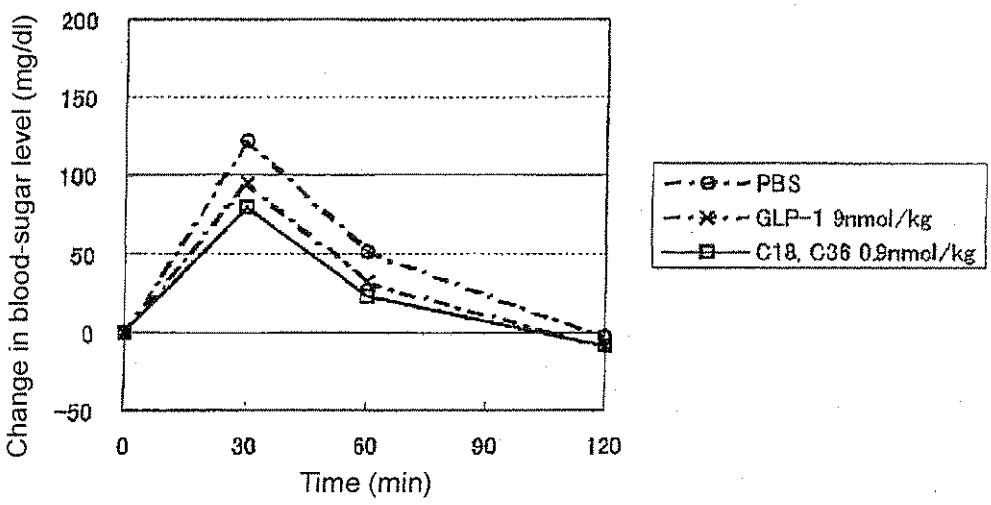
[FIG. 3]


Change in blood-sugar level (mg/dl)
200
150
100
50
0
-50
0
30
60
90
120
Time (min)
PBS
GLP-1 9nmol/kg
C36-HA4 9nmol/kg
C36-HA8 9nmol/kg

[FIG. 4]


Change in blood-sugar level (mg/dl)
200
150
100
50
0
-50
0
30
60
90
120
Time (min)
PBS
GLP-1 9nmol/kg
K26 9nmol/kg

[FIG. 5]


Change in blood-sugar level (mg/dl)
200
150
100
50
0
-50
0
30
60
90
120
Time (min)
PBS
GLP-1 9nmol/kg
C18, C36 0.9nmol/kg

SEQUENCE LISTING

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<130> OCKP0806P1F

<150> JP2008-157583
<151> 2008-06-17

<150> JP2008-326609
<151> 2008-12-22

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<170> PatentIn version 3.1

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


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            20                  25                  30


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            20                  25                  30


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 1               5                  10                  15
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20 25 30

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1 5 10 15

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20 25 30

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1 5 10 15

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20 25 30

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1 5 10 15

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

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1 5 10 15

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20 25 30

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

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20 25 30

<210> 30
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<400> 30

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

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<400> 31

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1 5 10 15

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

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1 5 10 15

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

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1 5 10 15

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

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<400> 34

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1 5 10 15

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

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<222> (28)..(28)
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1 5 10 15

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20 25 30

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20 25 30

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<400> 37

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20 25 30

<210> 38
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<400> 38

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1 5 10 15

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20 25 30

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20 25 30

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20 25 30

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20 25 30

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<400> 43

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

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

<210> 44
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (a41)

<220>
<221> CARBOHYD
<222> (20)..(20)
<223>

<220>
<221> CARBOHYD
<222> (28)..(28)
<223>

<400> 44

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

Gln Ala Ala Asn Glu Phe Ile Ala Trp Leu Val Asn Gly Arg Gly

20 25 30

<210> 45
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (a42)

<220>
<221> CARBOHYD
<222> (24)..(24)
<223>

<220>
<221> CARBOHYD
<222> (30)..(30)
<223>

<400> 45

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

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

<210> 46
<211> 32
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (a43)

<220>
<221> CARBOHYD
<222> (12)..(12)
<223>

<220>
<221> CARBOHYD
<222> (16)..(16)
<223>

<220>
<221> CARBOHYD
<222> (32)..(32)
<223>

<400> 46

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

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

<210> 47
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (a44)

<220>

<221> CARBOHYD
<222> (12)..(12)
<223>

<220>
<221> CARBOHYD
<222> (16)..(16)
<223>

<220>
<221> CARBOHYD
<222> (20)..(20)
<223>

<400> 47

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

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

<210> 48
<211> 32
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (a45)

<220>
<221> CARBOHYD
<222> (20)..(20)
<223>

<220>
<221> CARBOHYD
<222> (30)..(30)
<223>

<220>
<221> CARBOHYD
<222> (32)..(32)
<223>

<400> 48

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

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

<210> 49
<211> 30
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (a46)

<220>
<221> CARBOHYD
<222> (12)..(12)
<223>

<220>
<221> CARBOHYD

<222> (16)..(16)
<223>

<220>
<221> CARBOHYD
<222> (20)..(20)
<223>

<220>
<221> MOD_RES
<222> (30)..(30)
<223> AMIDATION

<400> 49

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

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

<210> 50
<211> 39
<212> PRT
<213> Heloderma

<220>
<223> Exendin-4

<220>
<221> MOD_RES
<222> (39)..(39)
<223> AMIDATION

<400> 50

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 51
<211> 39
<212> PRT
<213> artificial sequence

<220>
<223> glycosylated Exendin-4

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Xaa12: Lys, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> Xaa14: Met, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE

<222> (16)..(16)
<223> Xaa16: Glu, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Xaa20: Arg, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (24)..(24)
<223> Xaa24: Glu, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (28)..(28)
<223> Xaa28: Asn, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (30)..(30)
<223> Xaa30: Gly, glycosylated Cys or glycosylated Asn

<220>
<221> MOD_RES
<222> (39)..(39)
<223> AMIDATION

<220>
<223> At least one of Xaa12, Xaa14, Xaa16, Xaa20, Xaa24, Xaa28 and Xaa30 is glycosylated Cys or glycosylated Asn.

<400> 51

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Xaa Gln Xaa Glu Xaa
1 5 10 15

Glu Ala Val Xaa Leu Phe Ile Xaa Trp Leu Lys Xaa Gly Xaa Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 52
<211> 30
<212> PRT
<213> artificial sequence

<220>
<223> BIM51077

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa8: Aib

<220>
<221> MISC_FEATURE
<222> (29)..(29)
<223> Xaa35: Aib

<220>
<221> MOD_RES
<222> (30)..(30)
<223> AMIDATION

<400> 52

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

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

<210> 53
<211> 30
<212> PRT
<213> artificial sequence

<220>
<223> glycosylated BIM51077

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Xaa8: Aib

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Xaa18: Ser, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> Xaa20: Leu, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Xaa22: Gly, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Xaa26: Lys, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (24)..(24)
<223> Xaa30: Ala, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (28)..(28)
<223> Xaa34: Lys, glycosylated Cys or glycosylated Asn

<220>
<221> MISC_FEATURE
<222> (29)..(29)
<223> Xaa35: Aib

<220>
<221> MISC_FEATURE
<222> (30)..(30)
<223> Xaa36: Arg, glycosylated Cys or glycosylated Asn

<220>
<221> MOD_RES
<222> (30)..(30)
<223> AMIDATION

<220>
<223> At least one of Xaa18, Xaa20, Xaa22, Xaa26, Xaa30, Xaa34 and Xaa36 is glycosylated Cys or glycosylated Asn.

<400> 53

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

Gln Ala Ala Xaa Glu Phe Ile Xaa Trp Leu Val Xaa Xaa Xaa
20 25 30

<210> 54
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b1) (Example 1)

<220>
<221> CARBOHYD
<222> (20)..(20)
<223> Cys glycosylated by disialo oligosaccharide

<220>
<221> CARBOHYD
<222> (28)..(28)
<223> Cys glycosylated by disialo oligosaccharide

<400> 54

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

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

<210> 55
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b2) (Example 2)

<220>
<221> CARBOHYD
<222> (12)..(12)
<223> Cys glycosylated by disialo oligosaccharide

<220>
<221> CARBOHYD
<222> (30)..(30)
<223> Cys glycosylated by disialo oligosaccharide

<400> 55

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

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

<210> 56
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b3) (Example 3)

<220>
<221> CARBOHYD
<222> (16)..(16)
<223> Cys glycosylated by disialo oligosaccharide

<220>
<221> CARBOHYD
<222> (24)..(24)
<223> Cys glycosylated by disialo oligosaccharide

<400> 56

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

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

<210> 57
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b4) (Example 4)

<220>
<221> CARBOHYD
<222> (16)..(16)
<223> Cys glycosylated by disialo oligosaccharide

<220>
<221> CARBOHYD
<222> (30)..(30)
<223> Cys glycosylated by disialo oligosaccharide

<400> 57

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

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

<210> 58
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b5) (Example 5)

<220>
<221> CARBOHYD
<222> (24)..(24)
<223> Cys glycosylated by disialo oligosaccharide

<220>
<221> CARBOHYD
<222> (30)..(30)
<223> Cys glycosylated by disialo oligosaccharide

<400> 58

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

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

<210> 59
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b6) (Example 6)

<220>
<221> CARBOHYD
<222> (24)..(24)
<223> Cys glycosylated by hyaluronan tetra saccharides

<400> 59

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

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

<210> 60
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b7) (Example 7)

<220>
<221> CARBOHYD
<222> (24)..(24)
<223> Cys glycosylated by hyaluronan octa saccharides

<400> 60

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

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

<210> 61
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b8) (Example 8)

<220>
<221> CARBOHYD
<222> (30)..(30)
<223> Cys glycosylated by hyaluronan tetra saccharides

<400> 61

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

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

<210> 62
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b9) (Example 9)

<220>
<221> CARBOHYD
<222> (30)..(30)
<223> Cys glycosylated by hyaluronan octa saccharides

<400> 62

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

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

<210> 63
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b10) (Example 10)

<220>
<221> CARBOHYD
<222> (24)..(24)
<223> Cys glycosylated by hyaluronan hexa-deca saccharides

<400> 63

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

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

<210> 64
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b11) (Example 11)

<220>
<221> CARBOHYD
<222> (30)..(30)
<223> Cys glycosylated by hyaluronan hexa-deca saccharides

<400> 64

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

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

<210> 65
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b12) (Example 12)

<220>
<221> CARBOHYD
<222> (30)..(30)
<223> Cys glycosylated by high mannose-type heptaoligosaccharide

<400> 65

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

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

<210> 66
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b13) (Example 13)

<220>
<221> CARBOHYD
<222> (20)..(20)
<223> Lys glycosylated by asialo oligosaccharide

<400> 66

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

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

<210> 67
<211> 39
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b14) (Example 14)

<220>
<221> CARBOHYD
<222> (30)..(30)
<223> Cys glycosylated by disialo oligosaccharide

<220>
<221> MOD_RES
<222> (39)..(39)
<223> AMIDATION

<400> 67

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Cys Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 68
<211> 30
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence of (b15) (Example 15)

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Aib

<220>
<221> CARBOHYD
<222> (20)..(20)
<223> Cys glycosylated by disialo oligosaccharide

<220>
<221> MISC_FEATURE
<222> (29)..(29)
<223> Aib

<220>
<221> MOD_RES
<222> (30)..(30)
<223> AMIDATION

<400> 68

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

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

<210> 69
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence having blocking groups (Example 1)

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> His having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Thr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Thr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Asp having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (11)..(11)

<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Tyr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> Gln having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Cys having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (21)..(21)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (25)..(25)
<223> Trp having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (28)..(28)
<223> Cys having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (30)..(30)
<223> Arg having blocking group Pbf

<400> 69

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

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

<210> 70
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence having blocking groups (Example 2)

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> His having blocking group Trt

<220>
<221> MISC_FEATURE

<222> (3)..(3)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Thr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Thr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Asp having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Cys having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Tyr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Glu having blocking group OtBu

<220>
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<222> (17)..(17)
<223> Gln having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Lys having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (21)..(21)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (25)..(25)
<223> Trp having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (28)..(28)
<223> Lys having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (30)..(30)

<223> Cys having blocking group Trt

<400> 70

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

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

<210> 71
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence having blocking groups (Example 3)

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> His having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Thr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Thr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Asp having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Tyr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (16)..(16)

<223> Cys having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> Gln having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Lys having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (21)..(21)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (24)..(24)
<223> Cys having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (25)..(25)
<223> Trp having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (28)..(28)
<223> Lys having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (30)..(30)
<223> Arg having blocking group Pbf

<400> 71

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

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

<210> 72
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence having blocking groups (Example 4)

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> His having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Thr having blocking group tBu

<220>
<221> MISC_FEATURE

<222> (7)..(7)
<223> Thr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Asp having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Ser having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Tyr having blocking group tBu

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Cys having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> Gln having blocking group Trt

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> Lys having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (21)..(21)
<223> Glu having blocking group OtBu

<220>
<221> MISC_FEATURE
<222> (25)..(25)
<223> Trp having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (28)..(28)
<223> Lys having blocking group Boc

<220>
<221> MISC_FEATURE
<222> (30)..(30)
<223> Cys having blocking group Trt

<400> 72

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Cys

1 5 10 15

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

<210> 73
<211> 31
<212> PRT
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<220>
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<222> (20)..(20)
<223> Lys having blocking group Boc

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<223> Glu having blocking group OtBu

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<223> Cys having blocking group Trt

<400> 73

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

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

<210> 74
<211> 31
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<220>
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<400> 74

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

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

<210> 75
<211> 31
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<223> Lys having blocking group Boc

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<400> 75

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

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

<210> 76
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence (Synthetic Example 2)

<400> 76

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

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

<210> 77
<211> 31
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<223> Lys having blocking group Boc

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<223> Cys having blocking group Trt

<400> 77

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

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

<210> 78
<211> 31
<212> PRT
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<220>
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<400> 78

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

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

<210> 79
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<223> Arg having blocking group Pbf

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<223> Arg having blocking group Pbf

<400> 79

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

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

<210> 80
<211> 31
<212> PRT
<213> artificial sequence

<220>
<223> amino acid sequence (Synthetic Example 4)

<400> 80

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

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

<210> 81
<211> 39
<212> PRT
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<220>
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<223> AMIDATION

<400> 81

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Cys Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 82
<211> 39
<212> PRT
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<220>
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<220>
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<222> (39)..(39)
<223> AMIDATION

<400> 82

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Cys Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 83

<211> 30
<212> PRT
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<220>
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<223> Xaa8: Aib

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<223> Ser having blocking group tBu

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<223> Asp having blocking group OtBu

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<223> Ser having blocking group tBu

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<223> AMIDATION

<400> 83

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

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

<210> 84
<211> 30
<212> PRT
<213> artificial sequence

<220>
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<223> Xaa35: Aib

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His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
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Gln Ala Ala Cys Glu Phe Ile Ala Trp Leu Val Lys Xaa Arg