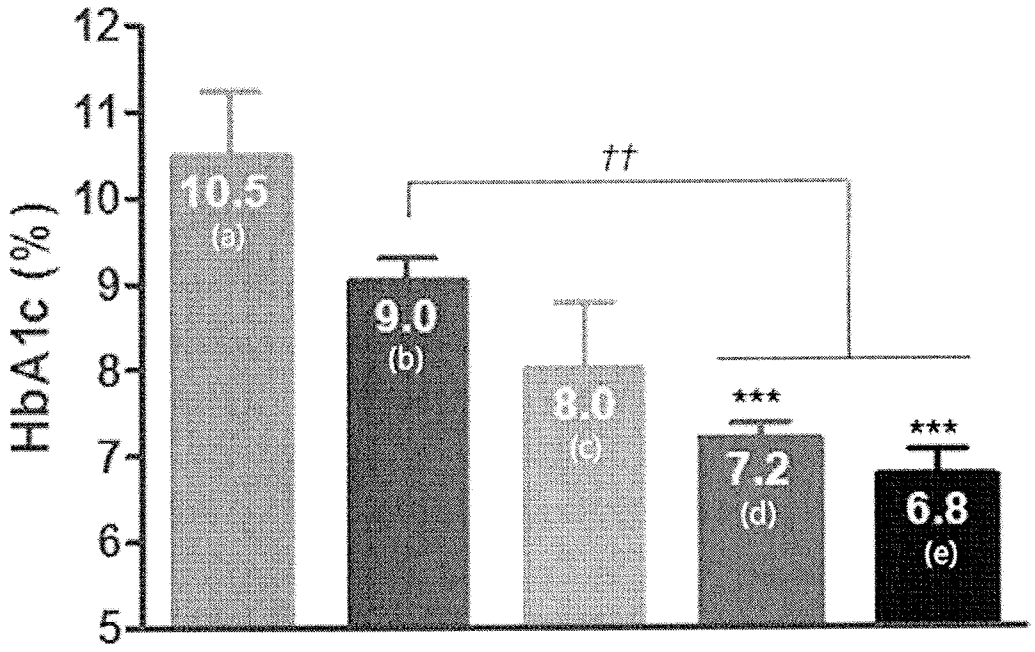
[DRAWINGS]

[FIG. 1]



(a) **Vehicle**

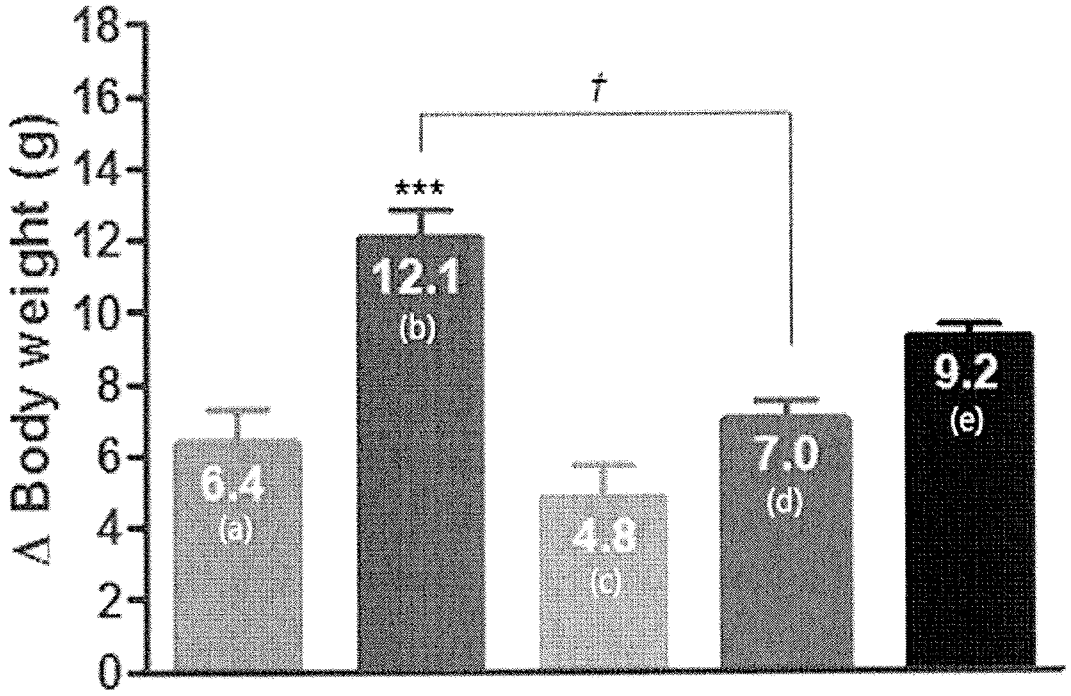
(b) Long acting insulin derivative conjugate 8.8nmol/kg

(c) Long acting CA exendin-4 conjugate 0.36nmol/kg

(d) Long acting insulin derivative conjugate 2.2nmol/kg + Long acting CA exendin-4 conjugate 0.36nmol/kg

(e) Long acting insulin derivative conjugate 8.8nmol/kg + Long acting CA exendin-4 conjugate 0.36nmol/kg

[FIG. 2]



(a) Vehicle

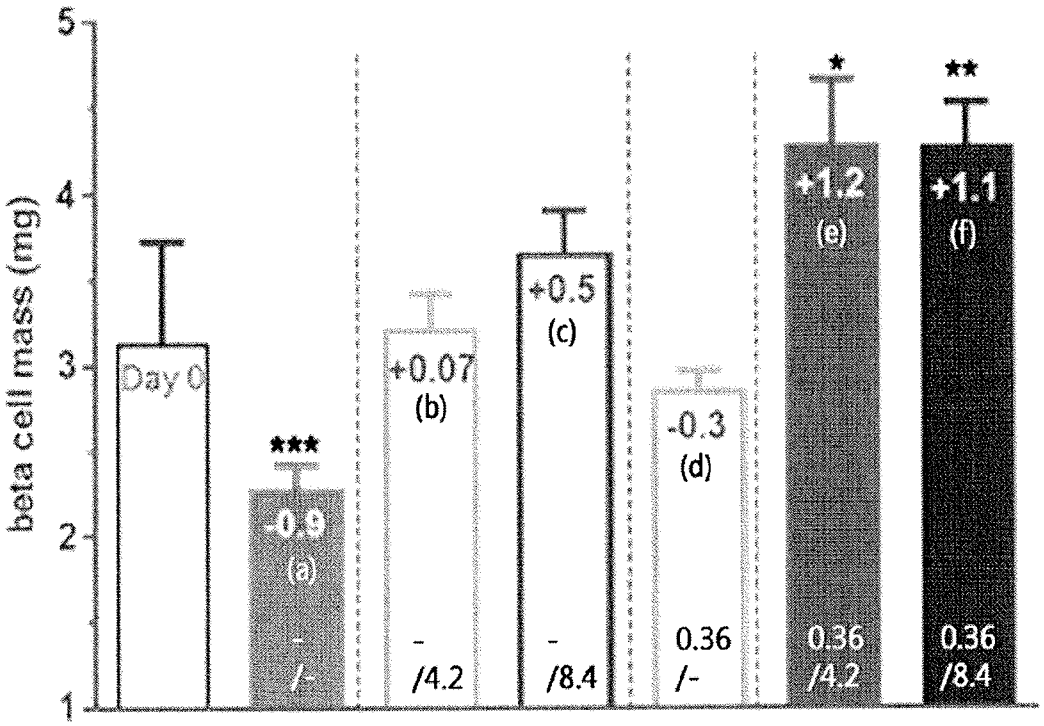
(b) Long acting insulin derivative conjugate 8.8nmol/kg

(c) Long acting CA exendin-4 conjugate 0.36nmol/kg

(d) Long acting insulin derivative conjugate 2.2nmol/kg + Long acting CA exendin-4 conjugate 0.36nmol/kg

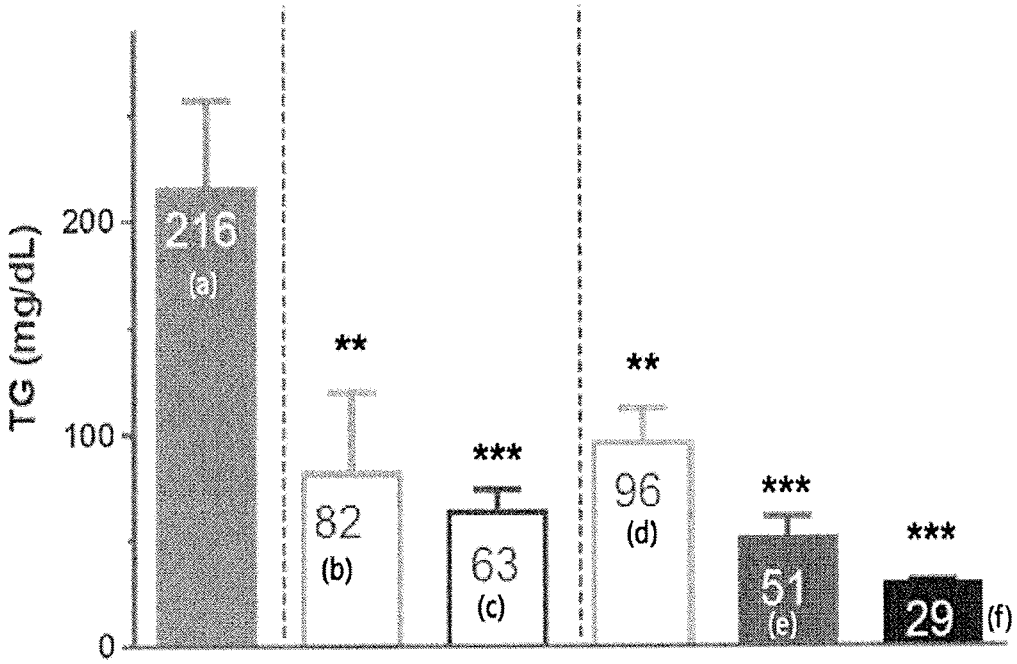
(e) Long acting insulin derivative conjugate 8.8nmol/kg + Long acting CA exendin-4 conjugate 0.36nmol/kg

[FIG. 3]



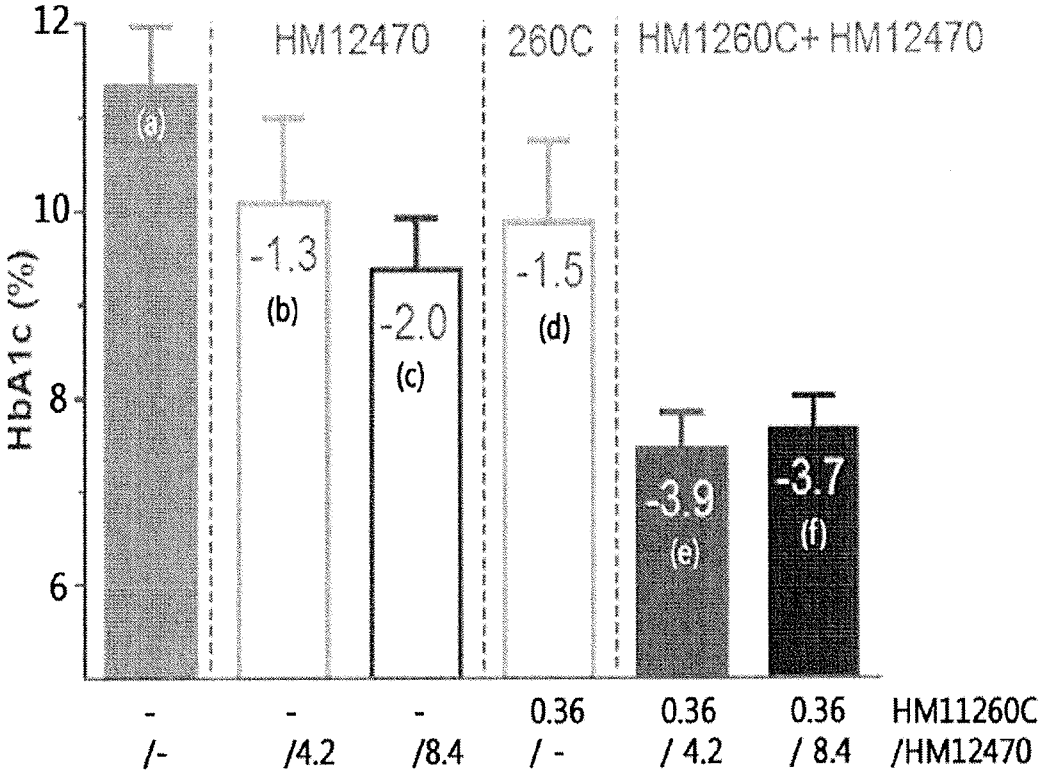
(a) Vehicle
(b) long acting insulin derivative conjugate 4.2nmol/kg
(c) long acting insulin derivative conjugate 8.4nmol/kg
(d) long acting CA exendin-4 conjugate 0.36nmol/kg
(e) long acting insulin derivative conjugate 4.2nmol/kg + long acting CA exendin-4 conjugate 0.36nmol/kg
(f) long acting insulin derivative conjugate 8.4nmol/kg + long acting CA exendin-4 conjugate 0.36nmol/kg

[FIG. 4]



(a) Vehicle
(b) long acting insulin derivative conjugate 4.2nmol/kg
(c) long acting insulin derivative conjugate 8.4nmol/kg
(d) long acting CA exendin-4 conjugate 0.36nmol/kg
(e) long acting insulin derivative conjugate 4.2nmol/kg + long acting CA exendin-4 conjugate 0.36nmol/kg
(f) long acting insulin derivative conjugate 8.4nmol/kg + long acting CA exendin-4 conjugate 0.36nmol/kg

[FIG. 5]



(a) Vehicle
(b) long acting insulin derivative conjugate 4.2nmol/kg
(c) long acting insulin derivative conjugate 8.4nmol/kg
(d) long acting CA exendin-4 conjugate 0.36nmol/kg
(e) long acting insulin derivative conjugate 4.2nmol/kg + long acting CA exendin-4 conjugate 0.36nmol/kg
(f) long acting insulin derivative conjugate 8.4nmol/kg + long acting CA exendin-4 conjugate 0.36nmol/kg

<110> HANMI PHARM. CO., LTD.

<120> Composition for Treating Diabetes Comprising Long-acting Insulin Analogue Conjugate and Long-acting Insulinotropic Peptide Conjugate

<130> OPA15094

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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

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<213> Artificial Sequence

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1 5 10 15

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20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
50 55 60

Arg Ala Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
65 70 75 80

Leu Glu Asn Tyr Cys Asn
85

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<211> 258
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<213> Artificial Sequence

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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

tccctgcaga agcgtggcgc ggtggaacaa tgctgtacca gcatctgctc cctctaccag 240

ctggagaact actgcaac 258

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<212> PRT
<213> Artificial Sequence

<220>
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1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Arg Arg
20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys

50 55 60

Arg Gly Ala Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
65 70 75 80

Leu Glu Asn Tyr Cys Asn
85

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<213> Artificial Sequence

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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

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ctggagaacg cgtgcaac 258

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<212> PRT
<213> Artificial Sequence

<220>
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Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Arg Arg
20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
50 55 60

Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
65 70 75 80

Leu Glu Asn Ala Cys Asn
85

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<212> DNA
<213> Artificial Sequence

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<223> Analog 4

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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

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ctggagaact actgcaac 258

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<213> Artificial Sequence

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Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Arg Arg
20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
50 55 60

Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
65 70 75 80

Leu Glu Asn Tyr Cys Asn
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<213> Artificial Sequence

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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

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1 5 10 15

Leu Val Cys Gly Glu Arg Ala Phe Phe Tyr Thr Pro Lys Thr Arg Arg
20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
50 55 60

Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
65 70 75 80

Leu Glu Asn Tyr Cys Asn
85

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<213> Artificial Sequence

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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

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1 5 10 15

Leu Val Cys Gly Glu Arg Gly Ala Phe Tyr Thr Pro Lys Thr Arg Arg
20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
50 55 60

Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
65 70 75 80

Leu Glu Asn Tyr Cys Asn
85

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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

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1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Ala Tyr Thr Pro Lys Thr Arg Arg
20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
50 55 60

Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Tyr Gln
65 70 75 80

Leu Glu Asn Tyr Cys Asn
85

<210> 33
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<220>
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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

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Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Arg Arg
20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
50 55 60

Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Glu Gln
65 70 75 80

Leu Glu Asn Tyr Cys Asn
85

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caggtggagc tgggcggggg ccctggtgca ggcagcctgc agcccttggc cctggagggg 180

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ctggagaact actgcaactg a 261

<210> 36
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Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr
1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Arg Arg
20 25 30

Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly Pro
35 40 45

Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln Lys
50 55 60

Arg Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu Asn Gln
65 70 75 80

Leu Glu Asn Tyr Cys Asn
85

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1 5 10 15

Glu Asn Tyr Cys Asn
20

<210> 38
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<212> PRT
<213> Artificial Sequence

<220>
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<400> 38
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1 5 10 15

Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr
20 25 30

<210> 39
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Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

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<213> Artificial Sequence

<220>
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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
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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