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SEQUENCE LISTING

<110> UNIVERSITY OF ULSTER

<120> Peptide Analogues of Glucagon for Diabetes Therapy

<130> P94694PC00

<140> PCT

<141> 2010-09-29

<150> UK 0917072.1

<151> 2009-09-29

<160> 19

<170> PatentIn version 3.5

<210> 1

<211> 29

<212> PRT

<213> Homo sapiens

<400> 1

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

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
20 25

<210> 2

<211> 28

<212> PRT

<213> Artificial sequence

<220>

<223> Analogue of C-terminally amidated human glucagon (N-terminal  
amidation not indicated on amino acid sequence itself) Peptide B

<400> 2

Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser Arg  
1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
20 25

<210> 3

<211> 28

<212> PRT

<213> Artificial sequence

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<223> Analogue of C-terminally amidated human glucagon (N-terminal  
amidation not indicated on amino acid sequence itself) - Peptide  
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Ser Gln Gly Thr Phe Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg  
1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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 <223> Analogue of C-terminally amidated human glucagon (N-terminal  
 amidation not indicated on amino acid sequence itself) - Peptide  
 D

<400> 4  
 Ser Gln Gly Thr Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg Arg  
 1 5 10 15

Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<210> 5  
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 amidation not indicated on amino acid sequence itself) - Peptide  
 E

<400> 5  
 Ser Gln Gly Thr Ala Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg  
 1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<210> 6  
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 <222> (11)..(11)  
 <223> Lysine modified by palmitate acylation

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 Ser Gln Gly Thr Ala Thr Ser Glu Tyr Ser Xaa Tyr Leu Asp Ser Arg  
 1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<210> 7  
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<220>  
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<220>  
 <221> MOD\_RES  
 <222> (10)..(10)  
 <223> Lysine modified by palmitate acylation

<400> 7

Ser Gln Gly Thr Thr Ser Glu Tyr Ser Xaa Tyr Leu Asp Ser Arg Arg  
 1 5 10 15

Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<210> 8  
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 <212> PRT  
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<220>  
 <223> Analogue of C-terminally amidated human glucagon (N-terminal amidation not indicated on amino acid sequence itself) - Peptide H

<400> 8

Ser Gln Gly Tyr Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg Arg  
 1 5 10 15

Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<210> 9  
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<220>  
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 <223> Lysine modified by palmitate acylation

<400> 9

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

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<210> 10  
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<223> Analogue of C-terminally amidated human glucagon (N-terminal amidation not indicated on amino acid sequence itself) - Peptide I

<400> 10

Ser Gln Gly Thr Phe Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg  
1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<220>

<221> MOD\_RES

<222> (28)..(28)

<223> Threonine modified by PEGylation

<400> 11

Ser Gln Gly Thr Phe Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg  
1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Xaa  
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<212> PRT

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<220>

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<220>

<221> MOD\_RES

<222> (29)..(29)

<223> Lysine modified by palmitate acylation

<400> 12

Ser Gln Gly Thr Phe Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg  
1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Xaa  
20 25

<210> 13

<211> 29

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<212> PRT  
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 <400> 13

His Ser Pro Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser  
 1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
 20 25

<210> 14  
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 <400> 14

Ser Gln Pro Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser Arg  
 1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<210> 15  
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 O  
 <400> 15

Ser Gln Pro Thr Phe Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg  
 1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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<210> 16  
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 <223> Analogue of C-terminally amidated human glucagon (N-terminal  
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<220>  
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&lt;222&gt; (28)..(28)

&lt;223&gt; Threonine modified by PEGylation

&lt;400&gt; 16

Ser Pro Gly Thr Phe Thr Ser Glu Tyr Ser Lys Tyr Leu Asp Ser Arg  
 1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Xaa  
 20 25

&lt;210&gt; 17

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Analogue of C-terminally amidated human glucagon (N-terminal amidation not indicated on amino acid sequence itself) - Peptide Q

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (11)..(11)

&lt;223&gt; Lysine modified by palmitate acylation via a bivalent spacer being gamma-glutamyl

&lt;400&gt; 17

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

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
 20 25

&lt;210&gt; 18

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Analogue of C-terminally amidated human glucagon (N-terminal amidation not indicated on amino acid sequence itself) - Peptide R

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (11)..(11)

&lt;223&gt; Lysine modified by palmitate acylation via a bivalent spacer being gamma-glutamyl

&lt;400&gt; 18

Ser Gln Pro Thr Phe Thr Ser Glu Tyr Ser Xaa Tyr Leu Asp Ser Arg  
 1 5 10 15

Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr  
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&lt;210&gt; 19

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<220>  
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 <222> (29)..(29)  
 <223> Lysine modified by palmitate acylation via a bivalent spacer  
 being gamma-glutamyl

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Arg	Ala	Gln	Asp	Phe	Val	Gln	Trp	Leu	Met	Asn	Thr	Xaa
			20					25				