

CLAIMS:

1. A peptidic compound having the formula (I):

5 4-thiazolylalanine-Ser-Gln-Gly-Thr-Phe-Thr-Ser-Asp-X10-Ser-Lys-Gln-X14-Glu-Ser-Arg-Arg-Ala-Gln-X21-Phe-Ile-Glu-Trp-Leu-Leu-Ala-X29-Gly-Pro-Glu-Ser-Gly-Ala-Pro-Pro-Pro-Ser-R¹

(I)

10 X10 represents an amino acid residue selected from Tyr, Leu, Val, Ile, Phe, Phenylglycine, 1-Naphthylalanine, 2-Fluorophenylalanine, Cyclohexylglycine and tert-Leucine,

X14 represents an amino acid residue selected from Leu and Nle

X21 represents an amino acid residue selected from Asp and Glu,

15 X29 represents an amino acid residue selected from Gly and Thr,

R¹ represents OH or NH₂
or a salt or solvate thereof.

20 2. A compound of claim 1, wherein
the C-terminal group R¹ is OH.

3. A compound according to any one of claims 1 - 2, wherein,

X10 represents Leu,

25 X14 represents an amino acid residue selected from Leu and Nle

X21 represents an amino acid residue selected from Asp and Glu,

X29 represents an amino acid residue selected from Gly and Thr,

R¹ represents OH,
or a salt or solvate thereof.

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4. A compound according to any one of claims 1 - 2, wherein,
X10 represents Tyr,
X14 represents an amino acid residue selected from Leu and Nle,
X21 represents Glu,
5 X29 represents an amino acid residue selected from Gly and Thr,
R¹ represents OH,
or a salt or solvate thereof.

5. A compound according to any one of claims 1 - 2, wherein,
10 X10 represents 1-Naphthylalanine,
X14 represents an amino acid residue selected from Leu and Nle,
X21 represents an amino acid residue selected from Asp and Glu,
X29 represents Thr,
R¹ represents OH,
15 or a salt or solvate thereof.

6. A compound according to any one of claims 1 - 2, wherein,
X10 represents Cyclohexylglycine,
X14 represents an amino acid residue selected from Leu and Nle,
20 X21 represents an amino acid residue selected from Asp and Glu,
X29 represents Thr,
R¹ represents OH,
or a salt or solvate thereof.

7. A compound according to any one of claims 1 - 2, wherein,
X10 represents an amino acid residue selected from Tyr, Leu, Val, Ile,
Phenylglycine, 1-Naphthylalanine, 2-Fluorophenylalanine and Cyclohexylglycine,
X14 represents Leu,
X21 represents an amino acid residue selected from Asp and Glu,
25 X29 represents an amino acid residue selected from Gly and Thr,
R¹ represents OH,

or a salt or solvate thereof.

8. A compound according to any one of claims 1 - 2, wherein,

X10 represents an amino acid residue selected from Tyr, Leu, Ile, Phe, 1-Naphthylalanine, Cyclohexylglycine and tert-Leucine

X14 represents Nle,

X21 represents an amino acid residue selected from Asp and Glu,

X29 represents Thr,

R¹ represents OH,

or a salt or solvate thereof.

9. A compound according to any one of claims 1 - 2, wherein,

X10 represents an amino acid residue selected from Leu, Phe, 1-Naphthylalanine, 2-Fluorophenylalanine and Cyclohexylglycine,

X14 represents an amino acid residue selected from Leu and Nle

X21 represents Asp,

X29 represents Thr,

R¹ represents OH,

or a salt or solvate thereof.

10. A compound according to any one of claims 1 - 2, wherein,

X10 represents an amino acid residue selected from Tyr, Leu, Val, Ile, Phenylglycine, 1-Naphthylalanine, Cyclohexylglycine and tert-Leucine,

X14 represents an amino acid residue selected from Leu and Nle

X21 represents Glu,

X29 represents an amino acid residue selected from Gly and Thr,

R¹ represents OH,

or a salt or solvate thereof.

11. A compound according to any one of claims 1 - 2, wherein,

X10 represents an amino acid residue selected from Tyr, Leu, Val, Ile, Phe, Phenylglycine, 1-Naphthylalanine, 2-Fluorophenylalanine, Cyclohexylglycine and tert-Leucine,

X14 represents an amino acid residue selected from Leu and Nle

5 X21 represents an amino acid residue selected from Asp and Glu,

X29 represents Thr,

R¹ represents OH,

or a salt or solvate thereof.

10 12. A compound according to any one of claims 1 - 2, wherein,

X10 represents an amino acid residue selected from Tyr, Leu and Val,

X14 represents Leu

X21 represents Glu,

X29 represents Gly,

15 R¹ represents OH,

or a salt or solvate thereof.

13. A compound according to any one of claims 1 - 12, selected from the compounds of SEQ ID NO: 3 - 25 as well as salts or solvates thereof.

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14. A compound according to any one of claims 1 - 13, selected from the compounds of SEQ ID NO: 3, 5, 6, 9, 15, 20, 23, 24, and 25 as well as salts or solvates thereof.

25 15. A compound of any one of claims 1 - 14 for use in medicine, particularly in human medicine.

16. The compound for use according to claim 15 which is present as an active agent in a pharmaceutical composition together with at least one pharmaceutically acceptable carrier.

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17. The compound for use according to any one of claims 15 - 16 for treating hypoglycemia, increase blood glucose levels, or as adjunctive therapy with insulin.
- 5 18. The compound for use according to any one of claims 15 - 16 for the treatment or prevention of hypoglycemia, type 2 diabetes mellitus and for delaying progression from prediabetes to type 2 diabetes.
- 10 19. A pharmaceutical composition comprising at least one compound according to any one of claims 1 – 14 or a physiologically acceptable salt or solvents of any of them.
- 15 20. Use of at least one compound of formula I according to any one of claims 1 – 14 in the manufacture of a medicament for treating hypoglycemia.
- 20 21. Use of at least one compound of formula I according to any one of claims 1 – 14 and of at least one other compound useful for treating hypoglycemia in the manufacture of a medicament for treating hypoglycemia.
- 25 22. The use according to claims 20 – 21, wherein the medicament comprising at least one compound of formula I and at least one other compound useful for treating hypoglycemia is to be administered simultaneously, separately or sequentially.
23. The use according to claims 20 – 22 wherein the medicament is to be administered parenterally.