

CLAIMS

- 1 An isolated or synthetic peptide for use in treatment of human disease having been provided with at least one peptide motif capable of modulating binding of human C-peptide to a human elastin receptor.
- 5 2 An isolated or synthetic peptide according to claim 1, wherein the peptide has at least one human elastin receptor binding motif GxxPG and has at least one amino acid Q, wherein G represents the one-letter code for the amino acid glycine, P for the amino acid proline, Q for the amino acid glutamine and x for any amino acid, the peptide consisting of 5-30 amino acids.
- 10 3 A peptide according to claim 1 or 2 consisting of 5-20 amino acids.
- 4 A peptide according to claim 1 or 2 consisting of 5-15 amino acids.
- 5 A peptide according to claim 1 or 2 consisting of 5-12 amino acids.
- 6 A peptide according to claim 1 or 2 consisting of 5-9 amino acids.
- 7 A peptide according to anyone of claims 2 to 6 for use in treatment of inflammation.
- 15 8 A peptide according to anyone of claims 2 to 7 for use in treatment of type 1 diabetes and/or end-stage type 2 diabetes.
- 9 A peptide according to anyone of claims 2 to 8 for use in treatment of micro-vascular complications.
- 10 A peptide according to anyone of claims 2 to 9 for use in treatment of micro-vascular complications in type 1 diabetes and/or end-stage type 2 diabetes.
- 20 11 A peptide according to anyone of claims 1 to 10 capable of combining with a human elastin receptor on a cell and initiating the same physiological activity typically produced by the binding of human C-peptide to the human elastin receptor.
- 12 A peptide according to claim 1 having at least the motif QDEA (SEQ ID NO: 31),
- 25 wherein the peptide inhibits the binding of human C-peptide to the human elastin receptor and reduces the physiological activity of human C-peptide, the peptide consisting of 4-40 amino acids.
- 13 A peptide according to claim 12 consisting of 4-20 amino acids.

- 14 A peptide according to claim 12 consisting of 4-15 amino acids.
- 15 A peptide according to claim 12 consisting of 4-12 amino acids.
- 16 A peptide according to claim 12 consisting of 4-9 amino acids.
- 17 A peptide according to any of claims 12 to 16 for use in treatment of treat human
5 insulin resistance.
- 18 A peptide according to any of claims 12 to 17 for use in treatment of treat human
dyslipidemia.
- 19 A peptide according to any of claims 12 to 18 for use in treatment of treat human
hypertension.
- 10 20 A peptide according to any of claims 12 to 19 for use in treatment of treat human
macrovascular complications.