

CLAIMS

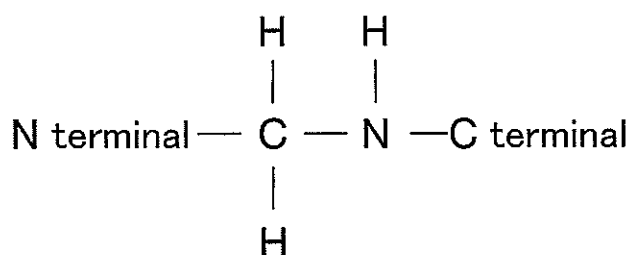
1. A compound comprising the sequence represented by the following general formula 1:

X1 Val X2 Ile Phe Thr Tyr Gly X3 Leu Gln Arg X4 Gln Glu Lys Glu Arg X5 Lys
Pro Gln (formula 1)

[wherein all bonds between amino acids, except the X1-Val bond, are amide bonds;

the X1-Val bond is an amide bond or a bond represented by the following formula 2

[Formula 1]



(formula 2)

X1 is an aromatic amino acid or a heteroaromatic amino acid;

X2 is proline or sarcosine;

X3 is glutamic acid or aspartic acid;

X4 is methionine or leucine;

X5 is asparagine or proline]

or a pharmaceutically acceptable salt thereof.

2. The compound or pharmaceutically acceptable salt thereof according to claim 1, wherein

X1 is phenylalanine or β -homophenylglycine.

3. A compound which is depicted by the sequence selected from the group consisting of SEQ ID NOS: 3 to 15 or a pharmaceutically acceptable salt thereof.

4. A pharmaceutical composition for the treatment of a disease associated with a functional abnormality in the gastrointestinal tract, which comprises the compound or

pharmaceutically acceptable salt thereof according to any one of claims 1 to 3.

5. The pharmaceutical composition according to claim 4, wherein the disease associated with a functional abnormality in the gastrointestinal tract is selected from the group consisting of functional dyspepsia, diabetic gastroparesis, gastro-esophageal reflux disease, irritable bowel syndrome, small intestinal bacterial overgrowth, colonic pseudo-obstruction, paralytic ileus, chronic idiopathic intestinal pseudo-obstruction, and post-operative ileus.

6. The pharmaceutical composition according to claim 4 or 5 which is intended for transmucosal administration.

7. The pharmaceutical composition according to claim 6, wherein the transmucosal administration is pulmonary or intranasal administration.