

<b>Cat#</b>	<b>SP-100257-1</b>
<b>Description:</b>	[Leu15]-Gastrin I (human)[Leu15]-Gastrin I (human)
<b>Sequence:</b>	Pyr-Gly-Pro-Trp-Leu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Leu-Asp-Phe-NH <sub>2</sub> ; MW: 2080.19
<b>Size:</b>	1 mg
<b>Purity:</b>	>95%
<b>Store:</b>	Desiccated at -20oC.

Gastrin is a peptide hormone that stimulates secretion of gastric acid (HCl) by the parietal cells of the stomach and aids in gastric motility. It is released by G cells in the pyloric antrum of the stomach, duodenum, and the pancreas.

Gastrin binds to cholecystokinin B receptors to stimulate the release of histamines in enterochromaffin-like cells, and it induces the insertion of K<sup>+</sup>/H<sup>+</sup> ATPase pumps into the apical membrane of parietal cells (which in turn increases H<sup>+</sup> release into the stomach cavity). Its release is stimulated by peptides in the lumen of the stomach.

The presence of gastrin stimulates parietal cells of the stomach to secrete hydrochloric acid (HCl)/gastric acid. This is done both directly on the parietal cell and indirectly via binding onto CCK2/gastrin receptors on ECL cells in the stomach, which then responds by releasing histamine, which in turn acts in a paracrine manner on parietal cells stimulating them to secrete H<sup>+</sup> ions. This is the major stimulus for acid secretion by parietal cells.

*All peptides are for in vitro research use only.*

**References:** Lund T, (1986). Hum. Genet. 73 (1): 77–80; Feng J, (2010). Proc. Natl. Acad. Sci. U.S.A. 107 (41): 17791–17796; Holst JJ, (1992). Digestion 51 (2): 95–102; Johnson LR (1984). Endocrinology 114 (3): 743–746.

#### Related material available from ADI

Catalog# Prod Description

SP-100256-1	Biotin-[Glu1]-Gastrin I (human) (phosphorylated)
SP-100257-1	[Leu15]-Gastrin I (human)
SP-100258-1	Gastrin I (1-14) (human)
SP-100259-1	Gastrin I (rat)
SP-100260-5	Minigastrin I (human)
SP-100261-1	Gastrin Releasing Peptide (GRP) (1-16) (porcine)
SP-100262-5	Gastrin Releasing Peptide (GRP) (14-27) (human, porcine, canine)

SP-100263-5 Ac-Gastrin Releasing Peptide (GRP) (20-26) (human, porcine, canine)

SP-52253-1 Gastrin I, Human [pGlu-Gly-Pro-Trp-Leu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Met-Asp-Phe-NH<sub>2</sub>; MW: 2098.22]

SP-52254-1 Gastrin Releasing Peptide, Human [Val-Pro-Leu-Pro-Ala-Gly-Gly-Gly-Thr-Val-Leu-Thr-Lys-Met-Tyr-Pro-Arg-Gly-Asn-His-Trp-Ala-Val-Gly-His-Leu-Met-NH<sub>2</sub>; MW: 2859.40]

SP-52255-1 Gastrin Releasing Peptide, Porcine [Ala-Pro-Val-Ser-Val-Gly-Gly-Gly-Thr-Val-Leu-Ala-Lys-Met-Tyr-Pro-Arg-Gly-Asn-His-Trp-Ala-Val-Gly-His-Leu-Met-NH<sub>2</sub>; MW: 2805.40]

SP-55164-1 Gastrin-1, Rat [pGlu-Arg-Pro-Pro-Met-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Met-Asp-Phe-NH<sub>2</sub>; MW: 2126.32]

SP-55295-1 Gastrin, Chicken [H-Phe-Leu-Pro-His-Val-Phe-Ala-Glu-Leu-Ser-Asp-Arg-Lys-Gly-Phe-Val-Gln-Gly-Asn-Gly-Ala-Val-Glu-Ala-Leu-His-Asp-Phe-Tyr-Pro-Asp-Trp-Met-Asp-Phe-NH<sub>2</sub>; MW: 4055.58]

SP-55310-1 Pentagastrin [Boc-beta-Ala-Trp-Met-Asp-Phe-NH<sub>2</sub>; MW: 768.79]

SP-61115-1 Biotin - Gastrin (1-17) (AA: Biotin-Glu-Gly-Pro-Trp-Leu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Met-Asp-Phe-NH<sub>2</sub>) (MW: 2342.56)

SP-71719-5 Gastrin Tetrapeptide (AA: Trp-Met-Asp-Phe-NH<sub>2</sub>) (MW: 596.71)

SP-88140-1 Big Gastrin - 1, human (AA: Pyr-Leu-Gly-Pro-Gln-Gly-Pro-Pro-His-Leu-Val-Ala-Asp-Pro-Ser-Lys-Lys-Gln-Gly-Pro-Trp-Leu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Met-Asp-Phe-NH<sub>2</sub>) (MW: 3849.30)

SP-88141-1 Biotin - Gastrin Releasing Peptide, human (AA: Biotin-Val-Pro-Leu-Pro-Ala-Gly-Gly-Gly-Thr-Val-Leu-Thr-Lys-Met-Tyr-Pro-Arg-Gly-Asn-His-Trp-Ala-Val-Gly-His-Leu-Met-NH<sub>2</sub>) (MW: 3085.74)

SP-89392-5 Boc-(Asp(OBzl)16)-Gastrin I (13-17) (human) (AA: Boc-Gly-Trp-Met-Asp(OBzl)-Phe-NH<sub>2</sub>) (MW: 846.02)

**SP-100257-1** 160404SV