ALPHA DIAGNOSTIC INTERNATIONAL

LIFE TECH Life Technologies™ Your Molecular & Cell Technology Partner

Product Data Sheet

Cat# **SP-52254-1**

Description: 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-NH2; MW: 2859.40]

Size: 1 mg

Purity: >95%

Store: Desiccated at -20oC.

Gastrin-releasing peptide, also known as GRP, is a regulatory molecule that has been implicated in a number of physiological and pathophysiological processes such as gastrin release and regulation of gastric acid secretion and enteric motor function. The human GRP gene is located on chromosome 18.

The gene from which GRP is derived encodes a number of bombesin-like peptides. Its 148-amino acid preproprotein, following cleavage of a signal peptide, is further processed to produce either the 27-amino acid gastrin-releasing peptide or the 10-amino acid neuromedin C. These smaller peptides regulate numerous functions of the gastrointestinal and central nervous systems, including release of gastrointestinal hormones, smooth muscle cell contraction, and epithelial cell proliferation

The post-ganglion fibers of the vagus nerve that innervate the G cells of the stomach release GRP, which stimulates the G cells to release gastrin. GRP is also involved in the biology of the circadian system, playing a role in the signaling of light to the master circadian oscillator in the suprachiasmatic nuclei of the hypothalamus. Furthermore, GRP seems to mediate certain aspects of stress

Gastrin-releasing peptide and neuromedin C, it is postulated, play a role in human cancers of the lung, colon, stomach, pancreas, breast, and prostate.

General references: Merali Z (2000). *Neuropeptides* **33** (5): 376–86. Lebacq-Verheyden AM (1987) Somat. Cell Mol. Genet. 13 (1): 81–6. Merali Z (1999) *Neuropeptides* **33** (5): 376–86. Mason S (2002) *Eur. J. Pharmacol.* **438** (1-2): 25–34.

Related items:

Catalog#	ProdDescription
SP-100258-1	Gastrin I (1-14) (human) (AA: Pyr-Gly-Pro-Trp-Leu-Glu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp) (MW: 1705.76)
SP-100259-1	Gastrin I (rat) (AA: Pyr-Arg-Pro-Pro-Met-Glu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Met-Asp-Phe-NH2) (MW: 2126.3)
SP-101041-1	Gastrin Releasing Peptide-Lys(Biotin), human (AA: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-Lys(Biotin)) (MW: 2859.3)
SP-101813-1	Gastrin Releasing Peptide (1-16), human (AA: Val-Pro-Leu-Pro-Ala-Gly-Gly-Gly-Thr-Val-Leu-Thr-Lys-Met-Tyr-Pro) (MW: 1600.9)
SP-52253-1	Gastrin I, Human [pGlu-Gly-Pro-Trp-Leu-Glu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Met-Asp-Phe-NH2; 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-NH2; 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-NH2; MW: 2805.40]
SP-55164-1	Gastrin-1, Rat [pGlu-Arg-Pro-Pro-Met-Glu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Met-Asp-Phe-NH2; 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-NH2; MW: 4055.58]
SP-71719-5	Gastrin Tetrapeptide (AA: Trp-Met-Asp-Phe-NH2) (MW: 596.71)

SP-52254-1 140225p

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