

Gastrin (H-90): sc-20729

BACKGROUND

Gastrin, which is normally formed by mucosal cells in the gastric antrum and by the D cells of the pancreatic islets, is a hormone whose main function is to stimulate secretion of HCl by the gastric mucosa. HCl, in turn, inhibits gastrin formation. Gastrin also stimulates smooth muscle contraction and increases blood circulation and water secretion in the stomach and intestine. Gastrin is regulated by epidermal growth factor in both mice and humans. Gastrin is excreted in excess by pancreatic tumors in the Zollinger-Ellison syndrome. Gastrin maps to human chromosome 17q-21. Gastrin-Releasing Peptide (GRP) stimulates the release of gastrin as well as other gastrointestinal hormones, in addition to acting as an autocrine growth factor for certain cell types. High levels of GRP are found in the human lung just after birth and levels decrease thereafter in parallel with the observed disease in number of pulmonary neuroendocrine cells. GRP is known to promote lung tumorigenesis in model systems and, interestingly, is induced by retinoic acid. GRP is involved in several functions with the hypothalamus, and is thought to play a role in regulating pituitary hormone secretion. GRP maps to human chromosome 18q21.

REFERENCES

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4. Koh, T.J. and Wang, T.C. 1995. Molecular cloning and sequencing of the murine gastrin gene. *Biochem. Biophys. Res. Commun.* 216: 34-41.
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CHROMOSOMAL LOCATION

Genetic locus: GAST (human) mapping to 17q21.2, GAST (mouse) mapping to 11 D.

SOURCE

Gastrin (H-90) is a rabbit polyclonal antibody raised against amino acids 1-90 mapping near the N-terminus of Gastrin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Gastrin (H-90) is recommended for detection of Gastrin 71, 52, 34 and 17 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Gastrin siRNA (h): sc-37103, Gastrin shRNA Plasmid (h): sc-37103-SH and Gastrin shRNA (h) Lentiviral Particles: sc-37103-V.

Molecular Weight of Gastrin: 2/4/14 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Gastrin (B-10): sc-28302**, our highly recommended monoclonal alternative to Gastrin (H-90).