

Gastrin (1-90): sc-4466 WB

BACKGROUND

Gastrin is a hormone which is normally formed by mucosal cells in the gastric antrum and by the D cells of the pancreatic islets. Gastrin is responsible for the stimulation of various digestive functions. In response to Gastrin, the pancreas secretes digestive enzymes, and the stomach mucosa produces and secretes hydrochloric acid. 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, and 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 a 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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STORAGE

Store at -20° C; stable for one year from the date of shipment.

SOURCE

Gastrin (1-90) is expressed in *E. coli* as a 37 kDa tagged fusion protein corresponding to amino acids 1-90 of Gastrin of human origin.

PRODUCT

Gastrin (1-90) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

Gastrin (1-90) is suitable as a Western blotting control for sc-7788 and sc-20729.

RESEARCH USE

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