



BMA BIOMEDICALS



Peninsula Laboratories

Gastrin-1 (human) ELISA

Gastrin is a peptide hormone released by G cells in the pyloric antrum of the stomach, duodenum, and the pancreas. It stimulates secretion of gastric acid (HCl) by the parietal cells of the stomach and helps in gastric motility. Gastrin binds to cholecystokinin B receptors to stimulate the release of histamines in enterochromaffin-like cells, and it induces the insertion of K⁺/H⁺ ATPase pumps into the apical membrane of parietal cells. The encoded polypeptide is preprogastrin, which is enzymatically cleaved to produce progastrin and then gastrin in various forms such as gastrin-34 ("big gastrin"), gastrin-17 ("little gastrin"), gastrin-14 ("minigastrin"). Gastrin-1, also known as Gastrin-17 or "Little Gastrin", is a 17-amino acid peptide secreted by the G cells in the gastric mucosa. It is one of the major bioactive forms of gastrin found in tissue and plasma.

This ELISA was developed with serum from rabbits immunized with Gastrin-1 coupled to a carrier protein.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Product number:	S-1209 (Lot A17527)
Host species:	Rabbit IgG
Quantity:	96 tests
Format:	Formulated for extracted samples (EIAH type).
Shelf-life:	One year from date of purchase. Store refrigerated at 4° - 8°C.
Applications:	This ELISA has been validated with the included reagents. It is intended to be used with appropriately extracted samples, following protocol III. Please see www.bma.ch for protocols and general information.
Range:	0 - 10 ng/ml
Average IC₅₀:	0.42 ng/ml
Immunogen:	Synthetic peptide Pyr-Gly-Pro-Trp-Leu-Glu-Glu-Glu-Glu-Ala-Tyr-Gly-Trp-Met-Asp-Phe-NH ₂ coupled to carrier protein.

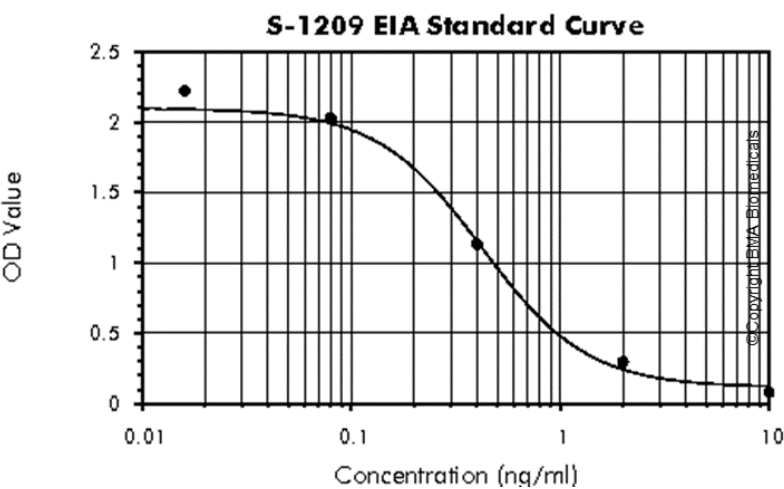
Protein database: [human-P01350](#)

Cross-Reactivity:

PEPTIDE	%
Gastrin 1 (human)	100
Big Gastrin 1 (human)	100
Gastrin I (rat)	24
CCK Octapeptide (sulfated)	6
CCK Octapeptide (desulfated)	3
Gastrin 1 (chicken)	0.5
Amylin (human)	0

Cross-Reactivity:	
PEPTIDE	%
GIP (porcine)	0
GRP (human)	0
Pancreatic Polypeptide (human)	0

Typical titration curve of Gastrin-1 in a competitive ELISA with this antibody:



Suggested Preparation of Standards		
	ng/ml	Range: 0.01 to 10ng/ml
Stock	1000	
S1	10.00	Add 10µl Stock + 990µl diluent
S2	2.50	Add 200µl S1 + 600µl diluent
S3	0.63	Add 200µl S2 + 600µl diluent
S4	0.16	Add 200µl S3 + 600µl diluent
S5	0.04	Add 200µl S4 + 600µl diluent
S6	0.01	Add 200µl S5 + 600µl diluent
S0	0.00	500µl diluent

Related Products:

- T-4346: Rabbit anti Gastrin-1, purified IgG
- T-4343: Rabbit anti Big Gastrin-1, neat antiserum, (hu)
- T-4347: Rabbit anti Gastrin-1, neat antiserum, (hu)
- T-4345: Rabbit anti Gastrin-1, diluted antiserum, (hu)
- T-4052: Rabbit anti Gastrin Inhibitory Polypeptide, diluted antiserum
- T-4349: Gastrin Realising Peptide, diluted antiserum, (ca, hu, po)
- T-4342: Rabbit anti Big Gastrin-1, purified IgG, (hu)

This product contains Thimerosal as a preservative and is intended for laboratory use and research purposes only. Not for diagnostic or therapeutic applications.