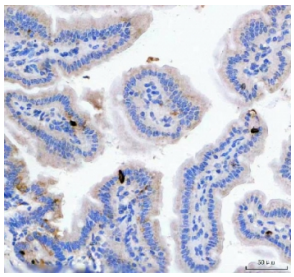
Gastric Inhibitory Polypeptide Antibody (R32431)

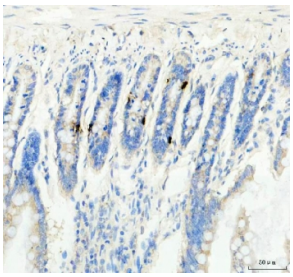
Catalog No.	Formulation	Size
R32431	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

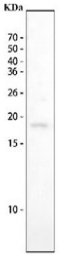
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P48756
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Gastric Inhibitory Polypeptide Antibody is available for research use only.



Gastric Inhibitory Polypeptide Antibody Mouse Colon IHC. Immunohistochemical staining of FFPE mouse colon tissue using Gastric Inhibitory Polypeptide Antibody following heat-induced epitope retrieval in pH8 EDTA buffer. The tissue was stained with an HRP-conjugated secondary antibody and DAB chromogen. Weak to moderate cytoplasmic staining is observed in scattered epithelial cells lining the colonic glands, with minimal background staining in the surrounding tissue. This distribution is consistent with expression in gastrointestinal enteroendocrine cells. This Gastric Inhibitory Polypeptide Antibody is suitable for investigating GIP expression, gastrointestinal endocrine cell biology, and incretin hormone signaling in mouse intestinal tissue.



Gastric Inhibitory Polypeptide Antibody Rat Colon IHC. Immunohistochemical staining of FFPE rat colon tissue using Gastric Inhibitory Polypeptide Antibody following heat-induced epitope retrieval in pH8 EDTA buffer. The tissue was stained with an HRP-conjugated secondary antibody and DAB chromogen. Faint to moderate cytoplasmic staining is observed in scattered epithelial cells within the colonic crypts, consistent with the distribution of gastrointestinal enteroendocrine cells, while the surrounding stromal tissue exhibits minimal background staining. This Gastric Inhibitory Polypeptide Antibody is well suited for investigating GIP expression, gastrointestinal endocrine cell biology, and incretin hormone signaling in rat intestinal tissue.



Gastric Inhibitory Polypeptide Antibody Mouse Stomach WB. Western blot analysis of mouse stomach lysate using Gastric Inhibitory Polypeptide Antibody. A specific band is detected at approximately 17 kDa, corresponding to the expected molecular weight of GIP. The observed band supports specific detection of the mature peptide in gastrointestinal tissue, consistent with its physiological role in nutrient-responsive endocrine signaling. This Gastric Inhibitory Polypeptide Antibody is well suited for Western blot analysis of GIP expression in studies of incretin hormone biology, gastrointestinal physiology, and metabolic regulation.

Description

Gastric Inhibitory Polypeptide Antibody recognizes gastric inhibitory polypeptide (GIP), now more commonly known as glucose-dependent insulinotropic polypeptide, an incretin hormone that plays a central role in coordinating nutrient absorption with endocrine regulation. GIP is synthesized by enteroendocrine K cells located primarily in the duodenum and proximal jejunum, where it is rapidly secreted following the ingestion of carbohydrates and dietary fats. Although originally identified for its ability to inhibit gastric acid secretion, subsequent research established that its predominant physiological function is to enhance glucose-dependent insulin release from pancreatic beta cells. Today, GIP is recognized as one of the body's principal incretin hormones and an important regulator of glucose metabolism, energy balance, and endocrine communication. A Gastric Inhibitory Polypeptide Antibody enables researchers to examine GIP expression, localization, and regulation in gastrointestinal tissues and metabolic disease models.

Binding of GIP to the GIP receptor activates cyclic AMP-dependent signaling pathways that potentiate insulin secretion during periods of elevated blood glucose while contributing to coordinated metabolic responses after food intake. Beyond its effects on pancreatic islets, GIP signaling has been implicated in adipose tissue metabolism, lipid storage, bone remodeling, and central nervous system regulation of energy homeostasis. The expanding appreciation of these biological functions has made GIP an important subject of investigation in endocrinology, obesity research, diabetes, and gastrointestinal physiology. Because GIP expression is tightly linked to enteroendocrine cell biology and hormonal regulation, a Gastric Inhibitory Polypeptide Antibody is valuable for characterizing endocrine cell populations and studying incretin signaling pathways across multiple experimental systems.

Dysregulation of GIP signaling has been associated with type 2 diabetes, obesity, insulin resistance, metabolic syndrome, and cardiovascular disease. Modern therapeutic strategies increasingly target both GIP and glucagon-like peptide 1 signaling to improve glycemic control and promote sustained weight loss, highlighting the growing importance of GIP biology in translational research. Additional studies continue to explore potential roles for GIP in inflammation, gastrointestinal disease, bone physiology, and neuroendocrine regulation. Accurate detection of GIP expression therefore supports investigations into endocrine adaptation, hormone secretion, metabolic regulation, and disease-associated changes in gastrointestinal function. Gastric Inhibitory Polypeptide Antibody provides researchers with a useful tool for examining these diverse biological processes.

Gastric Inhibitory Polypeptide Antibody is suitable for applications including immunohistochemistry, immunofluorescence, Western blotting, immunoprecipitation, and other protein detection methods, depending on individual antibody validation. NSJ Bioreagents provides carefully validated antibodies to support investigations of endocrine physiology, gastrointestinal

biology, diabetes, obesity, and metabolic signaling pathways. A Gastric Inhibitory Polypeptide Antibody is a valuable research reagent for detecting GIP and advancing studies of incretin hormone function, insulin secretion, nutrient sensing, and metabolic homeostasis.

Visit our GIP Antibody / Incretin Hormone Antibody page to explore additional validated antibodies and research tools for investigating GIP expression, incretin signaling, insulin secretion, glucose homeostasis, and metabolic regulation.

Application Notes

Optimal dilution for each application of the Gastric Inhibitory Polypeptide Antibody to be determined by the researcher.

Immunogen

Amino acids Y44-Q85 from the mouse protein were used as the immunogen for the Gastric Inhibitory Polypeptide Antibody.

Storage

After reconstitution, the Gastric Inhibitory Polypeptide Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Gastric inhibitory polypeptide antibody, GIP antibody, glucose-dependent insulinotropic polypeptide antibody, gastric inhibitory peptide antibody, incretin hormone antibody

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