

GIPR (R-19): sc-69416

BACKGROUND

GIPR (gastric inhibitory polypeptide receptor) is a 466 amino acid protein belonging to the G protein-coupled receptor 2 family. The activity of GIPR is mediated by G proteins, which activate adenylyl cyclase. Expressed as two isoforms produced by alternative splicing, GIPR is a multi-pass cell membrane protein that acts as a receptor for the glucose-dependent insulinotropic polypeptide (GIP). GIP is a major physiologic factor in the augmentation of the insulin response to oral glucose. GIP is a peptide hormone that is released postprandially from the small intestine and acts in concert with glucagon-like peptide GLP1 to potentiate glucose-induced insulin secretion from the pancreatic β cell. GIP has been shown to increase adenylyl cyclase activity, elevate intracellular calcium levels, and stimulate a mitogen-activated protein kinase pathway in the pancreatic β cell. GIP release is demonstrated predominantly after ingestion of carbohydrate and fat and the effects of acid on GIP are consistent with a role for GIP as an enterogastrone.

REFERENCES

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5. Tsukiyama, K., et al. 2006. Gastric inhibitory polypeptide as an endogenous factor promoting new bone formation after food ingestion. *Mol. Endocrinol.* 20: 1644-1651.
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CHROMOSOMAL LOCATION

Genetic locus: *Gipr* (mouse) mapping to 7 A3.

SOURCE

GIPR (R-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of GIPR of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-69416 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GIPR (R-19) is recommended for detection of GIPR of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

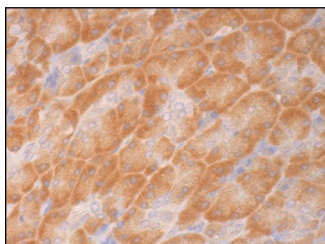
Suitable for use as control antibody for GIPR siRNA (m): sc-75135, GIPR shRNA Plasmid (m): sc-75135-SH and GIPR shRNA (m) Lentiviral Particles: sc-75135-V.

Molecular Weight of GIPR: 53 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



GIPR (R-19): sc-69416. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine cells.

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.