BACKGROUND

Glucose-dependent Insulinotropic polypeptide (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 (GLP)-1 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. Additionally, nutrient protein provides a potent stimulus for GIP expression, an effect that occurs at the posttranslational level and may be mediated in part through the acid-stimulatory properties of protein. 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


7. Park, J.C., et. al. 2006. Effects of sub-chronic exposure to naturally occurring N-terminally truncated metabolites of glucose-dependent Insulinotropic polypeptide (GIP) and glucagon-like peptide-1 (GLP-1), GLP(3-42) and GLP-1(9-36)amide, on insulin secretion and glucose homeostasis in ob/ob mice. J. Endocrinol. 191: 93-100.


CHROMOSOMAL LOCATION

Genetic locus: GIP (human) mapping to 17q21.32.

SOURCE

GIP (6F107) is a mouse monoclonal antibody raised against synthetic GIP of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GIP (6F107) is recommended for detection of GIP of human origin by 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 GIP siRNA (h): sc-72038, GIP shRNA Plasmid (h): sc-72038-SH and GIP shRNA (h) Lentiviral Particles: sc-72038-V.

Molecular Weight of GIP: 5 kDa.

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 for detailed protocols and support products.