10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GPR39 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP19112b

Specification

GPR39 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O43194

GPR39 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 2863

Other Names
G-protein coupled receptor 39, GPR39

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GPR39 Antibody (C-term) Blocking Peptide - Protein Information

Name GPR39

Function
Zinc-sensing receptor that can sense changes in extracellular Zn(2+), mediate Zn(2+) signal transmission, and participates in the regulation of numerous physiological processes including glucose homeostasis regulation, gastrointestinal mobility, hormone secretion and cell death (PubMed:18180304). Activation by Zn(2+) in keratinocytes increases the intracellular concentration of Ca(2+) and activates the ERK/MAPK and PI3K/AKT signaling pathways leading to epithelial repair (PubMed:20522546). Plays an essential role in normal wound healing by inducing the production of cytokines including the major inflammatory cytokine IL6 via the PKC/MAPK/CEBPB pathway (By similarity). Regulates adipose tissue metabolism, especially lipolysis, and regulates the function of lipases, such as hormone-sensitive lipase and adipose triglyceride lipase (By similarity). Plays a role in the inhibition of cell death and protects against oxidative, endoplasmic reticulum and mitochondrial stress by inducing secretion of the cytoprotective pigment epithelium-derived growth factor (PEDF) and probably other protective transcripts in a GNA13/RHOA/SRE-dependent manner (PubMed:18180304). Forms dynamic heteroreceptor complexes with HTR1A and GALR1 depending on cell type or specific physiological states, resulting in signaling diversity: HTR1A-GPR39 shows additive increase in signaling along the serum response element (SRE) and NF-kappa-B pathways while GALR1 acts as

an antagonist blocking SRE (PubMed:26365466).

Cellular Location
Cell membrane; Multi-pass membrane protein

Tissue Location
Expressed in many tissues, including the stomach, intestine and hypothalamus.

GPR39 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

GPR39 Antibody (C-term) Blocking Peptide - Images

GPR39 Antibody (C-term) Blocking Peptide - Background

Zn(2+) acts as a agonist. This receptor mediates its action by association with G proteins that activate a phosphatidylinositol-calcium second messenger system. Its effect is mediated mainly through G(q)-alpha and G(12)/G(13) proteins. Involved in regulation of body weight, gastrointestinal mobility, hormone secretion and cell death (By similarity).

GPR39 Antibody (C-term) Blocking Peptide - References

Sharir, H., et al. J. Biol. Chem. 285(34):26097-26106(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Holst, B., et al. J. Biol. Chem. 285(6):3973-3985(2010)Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :Zhang, Y., et al. J. Endocrinol. 199(3):457-470(2008)