

# **GPR39 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19112b

## **Specification**

## **GPR39 Antibody (C-term) - Product Information**

WB,E Application **Primary Accession** 043194 Other Accession NP 001499.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 51329 Antigen Region 379-407

## GPR39 Antibody (C-term) - Additional Information

#### **Gene ID 2863**

#### **Other Names**

G-protein coupled receptor 39, GPR39

#### Target/Specificity

This GPR39 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 379-407 amino acids from the C-terminal region of human GPR39.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

GPR39 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **GPR39 Antibody (C-term) - 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**

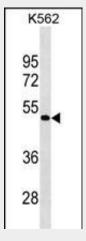
Expressed in many tissues, including the stomach, intestine and hypothalamus.

## GPR39 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# GPR39 Antibody (C-term) - Images



GPR39 Antibody (C-term) (Cat. #AP19112b) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the GPR39 antibody detected the GPR39 protein (arrow).



# GPR39 Antibody (C-term) - 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) - 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) GPR39 Antibody (C-term) - Citations

• Changes in obestatin gene and receptor-GPR39 expression in peripheral tissues of rat models of obesity, type 1 and type 2 diabetes.