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GPR39 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19112b

Product Information

Application	WB, E
Primary Accession	O43194
Other Accession	NP_001499.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40394
Calculated MW	51329
Antigen Region	379-407

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.

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.

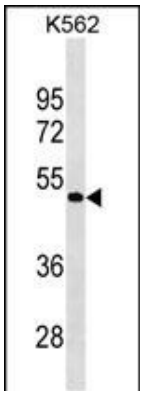
Background

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).

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)

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).

Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.