

## GPR39 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP19112b

### Product Information

---

<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">O43194</a>
<b>Other Accession</b>	<a href="#">NP_001499.1</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB40394
<b>Calculated MW</b>	51329
<b>Antigen Region</b>	379-407

### Additional Information

---

<b>Gene ID</b>	2863
<b>Other Names</b>	G-protein coupled receptor 39, GPR39
<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	GPR39 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

---

<b>Name</b>	GPR39
<b>Function</b>	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).

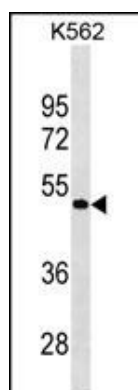
## References

---

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'.