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GPR39 Rabbit pAb

Catalog # AP97489

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O43194
Other Accession	O43194
Reactivity	Rat, Mouse
Predicted	Human, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51329
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GPR39.
Epitope Specificity	251-350/453
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GPCR39 is an integral membrane protein, which belongs to family 1 of G-protein coupled receptors. GPCR39 expression has been documented in human brain and peripheral tissues. ESTs have been isolated from human tissue libraries, including normal eye, brain, heart, melanocyte, uterus, vessel, cancerous brain, germ cell, kidney, and ovary.

Additional Information

Gene ID	2863
Other Names	ZnR; 4933415E13Rik; GPR39_HUMAN; GPR39; GPR39_MOUSE; G protein-coupled receptor 39; zinc sensing receptor
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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