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GPR97 Rabbit pAb

Catalog # AP97466

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q86Y34
Other Accession	Q86Y34
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60861
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GPR97
Epitope Specificity	101-200/549
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 2 family. LN-TM7 subfamily. Contains 1 GPS domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	G protein-coupled receptors (GPRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, comprise a superfamily of proteins that play a role in many different stimulus-response pathways. G protein coupled receptors translate extracellular signals into intracellular signals (G protein activation) and they respond to a variety of signaling molecules, such as hormones and neurotransmitters. GPR97 (G protein-coupled receptor 97), also known as PB99 or PGR26, is a 549 amino acid multi-pass membrane protein that contains one GPS domain and belongs to the G-protein coupled receptor 2 family. GPR97 functions as an orphan receptor that is thought to play a role in signaling events throughout the cell.

Additional Information

Gene ID	222487
Other Names	GPR97; PB99; PGR26; A030001G24Rik; Pb1; AGRG3_HUMAN; ADGRG3; G-protein coupled receptor 97; AGRG3_MOUSE; adhesion G protein-coupled receptor G3; G protein-coupled receptor 97
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	ADGRG3 {ECO:0000303|PubMed:30559745, ECO:0000312|HGNC:HGNC:13728}
Function	Adhesion G protein-coupled receptor (aGPCR) for glucocorticoid hormones such as cortisol, cortisone and 11- deoxycortisol (PubMed:33408414). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (PubMed:33408414). ADGRG3/GPR97 is coupled to G(o)/GNAO1 G proteins and mediates signaling by inhibiting adenylate cyclase activity (PubMed:33408414). May also signal through G-alpha(q)- proteins; additional evidence are however required to confirm this result in vivo (PubMed:22575658). Plays a role in the regulation of various processes including B-cell development, inflammation or innate immunity (PubMed:30559745, PubMed:36302784). Regulates migration of lymphatic endothelial cells in vitro via the small GTPases RhoA and CDC42 (PubMed:24178298). Antibody ligation leads to the production and activation of antimicrobial mediators like reactive oxygen species (ROS) and myeloperoxidase (MPO) as well as enhanced bacteria uptake and killing by granulocytes (PubMed:30559745). Additionally, collaborates with protease-activated receptor 2/PAR2 to stimulate neutrophil-driven antimicrobial responses and endothelial cell activation (PubMed:36302784).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Expressed in cultured primary dermal lymphatic endothelial cells (PubMed:24178298). Highly expressed in polymorphonuclear cells (PMNs) including neutrophilic, eosinophilic, and basophilic granulocytes (PubMed:30559745)

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