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GPR97 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17125a

Product Information

Application	WB, E
Primary Accession	Q86Y34
Other Accession	NP_740746.4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37259
Calculated MW	60861
Antigen Region	103-130

Additional Information

Gene ID	222487
Other Names	Probable G-protein coupled receptor 97, G-protein coupled receptor PGR26, GPR97, PGR26
Target/Specificity	This GPR97 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 103-130 amino acids from the N-terminal region of human GPR97.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	GPR97 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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)

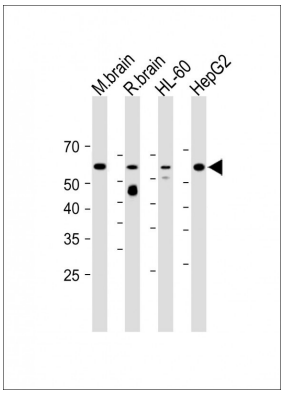
Background

GPR97 is an orphan receptor.

References

Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :
Bjarnadottir, T.K., et al. Genomics 84(1):23-33(2004)
Vassilatis, D.K., et al. Proc. Natl. Acad. Sci. U.S.A. 100(8):4903-4908(2003)
Fredriksson, R., et al. FEBS Lett. 531(3):407-414(2002)
Kuznicki, J., et al. Cell Biol. Int. Rep. 3(1):17-23(1979)

Images



All lanes: Anti-GPR97 Antibody (N-term) at 1:2000 dilution Lane 1: M. brain lysate Lane 2: R. brain lysate Lane 3: HL-60 whole cell lysate Lane 4: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 61 KDa Blocking/Dilution buffer: 5% NFDM/TBST.