

GPR97 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17125a

Product Information

| Application | WB, E |
|-------------------|--------------------|
| Primary Accession | <u>Q86Y34</u> |
| Other Accession | <u>NP_740746.4</u> |
| 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: <u>33408414</u>). 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:<u>33408414</u>). ADGRG3/GPR97 is coupled to G(o)/GNAO1 G proteins and mediates signaling by inhibiting adenylate cyclase activity (PubMed:<u>33408414</u>). May also signal through G-alpha(g)- 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:<u>30559745</u>). 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.

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