10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-GPR97 Antibody

Catalog # AP60568

Product Information

Application	WB, IF/IC
Primary Accession	Q86Y34
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60861

Additional Information

Gene ID	222487
Other Names	PGR26; Probable G-protein coupled receptor 97; G-protein coupled receptor PGR26
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GPR97. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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).

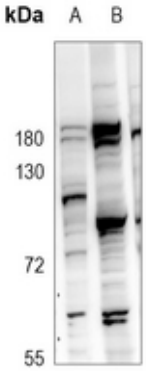
Cellular Location

Cell membrane; Multi-pass membrane protein

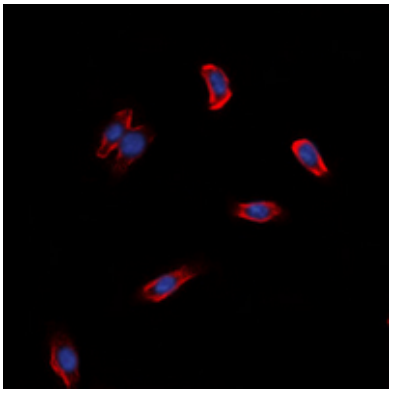
Tissue Location

Expressed in cultured primary dermal lymphatic endothelial cells (PubMed:24178298). Highly expressed in polymorphonuclear cells (PMNs) including neutrophilic, eosinophilic, and basophilic granulocytes (PubMed:30559745)

Images



Western blot analysis of GPR97 expression in HepG2 (A), SP20 (B) whole cell lysates. (Predicted band size: 60 kD; Observed band size: 60; 104 kD)



Immunofluorescent analysis of GPR97 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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