

Rabbit anti-Human GPR97 Polyclonal Antibody | anti-GPR97 antibody

GPR97 Antibody (N-term)

CATALOG # AAA287475	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

GPR97; Polyclonal Antibody; GPR97 Antibody (N-term); Probable G-protein coupled receptor 97; G-protein coupled receptor PGR26; PGR26; anti-GPR97 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
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.
Purity/Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Positions	103-130
Sequence Length	549
Applicable Applications for anti-GPR97 antibody	ELISA, WB (Western Blot)
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)
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
GPR97 Antibody (N-term) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the GPR97 antibody detected the GPR97 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-GPR97 antibody	GPR97 is an orphan receptor.
Product Categories/Family for anti-GPR97 antibody	Cell Biology; Signal Transduction; Phospho Antibodies
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)

NCBI AND UNIPROT INFORMATION

NCBI GI #	229093087
NCBI GeneID	222487
NCBI Accession #	NP_740746.4
NCBI GenBank Nucleotide #	NM_170776.4
UniProt Accession #	Q86Y34; Q6ZMF4; Q86SL9; Q8IZF1
Molecular Weight	60861
NCBI Official Full Name	probable G-protein coupled receptor 97 isoform 1
NCBI Official Synonym Full Names	adhesion G protein-coupled receptor G3
NCBI Official Symbol	ADGRG3
NCBI Official Synonym Symbols	PB99; GPR97; PGR26
NCBI Protein Information	probable G-protein coupled receptor 97
UniProt Protein Name	Probable G-protein coupled receptor 97
UniProt Gene Name	GPR97
UniProt Synonym Gene Names	PGR26
UniProt Entry Name	GPR97_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.