

GPCRW / GPR18 Antibody (Extracellular Domain)

Rabbit Polyclonal Antibody Catalog # ALS10030

Specification

GPCRW / GPR18 Antibody (Extracellular Domain) - Product Information

Application IHC-P Primary Accession 014330

Reactivity Human, Monkey

Host Rabbit
Clonality Polyclonal
Calculated MW 38kDa KDa
Dilution IHC-P~~N/A

GPCRW / GPR18 Antibody (Extracellular Domain) - Additional Information

Gene ID 2841

Other Names

N-arachidonyl glycine receptor, NAGly receptor, G-protein coupled receptor 18, GPR18, GPCRW

Target/Specificity

Human GPR18. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

GPCRW / GPR18 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

GPCRW / GPR18 Antibody (Extracellular Domain) - Protein Information

Name GPR18

Synonyms GPCRW

Function

G protein-coupled receptor (GPCR) that plays a role in diverse physiological processes particularly within the immune and nervous systems (PubMed:21732409, PubMed:26195725). Becomes active when triggered by various endogenous ligands including endocannabinoid N- arachidonyl glycine (NAGly), delta-9-tetrahydrocannabinol or resolvin D2/RvD2 derived from the omega-3 fatty acid docosahexaenoic acid (DHA) (PubMed:16844083, PubMed:24762058, PubMed:<a href="http://www.uniprot.org/citations/26195725"



target="_blank">26195725, PubMed:27572937). Upon RvD2 binding, facilitates the resolution of inflammation, aiding in tissue repair and homeostasis. Mechanistically, RvD2 ligation initiates Galphas protein coupling, activation of cAMP-PKA signaling pathway and phosphorylation of STAT3, leading to RvD2-stimulated macrophage phagocytosis (PubMed:27994074). Mediates NAGly-induced process of reorganization of actin filaments and induction of acrosomal exocytosis (PubMed:27572937). Activation by N-arachidonoyl glycine (NAGly) can also induce apoptosis in macrophages (By similarity). Plays a role in homeostasis of CD8+ subsets of intraepithelial lymphocytes (IELs) (CD8alphaalpha and CD8alphabeta IELs) in small intestine by supporting preferential migration of CD8alphaalpha T-cells to intraepithelial compartment over lamina propria compartment, and by mediating their reconstitution into small intestine after bone marrow transplant (By similarity). Also participates in hypotensive responses, mediating reduction in intraocular and blood pressure (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane

Tissue Location

Expressed in midpiece of spermatozoon (at protein level) (PubMed:27572937). Most abundant in testis and spleen (PubMed:16844083). Highly expressed in CD4 and CD8-positive T-cells as well as CD19-positive B-cells (PubMed:16844083)

Volume 50 µl

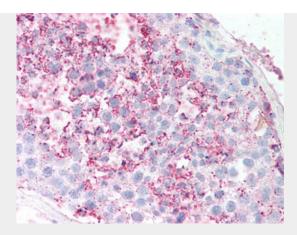
GPCRW / GPR18 Antibody (Extracellular Domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GPCRW / GPR18 Antibody (Extracellular Domain) - Images





Anti-GPR18 antibody ALS10030 IHC of human testis, seminiferous tubule.

GPCRW / GPR18 Antibody (Extracellular Domain) - Background

Receptor for N-arachidonyl glycine. The activity of this receptor is mediated by G proteins which inhibit adenylyl cyclase. May contribute to regulation of the immune system.

GPCRW / GPR18 Antibody (Extracellular Domain) - References

Gantz I.,et al.Genomics 42:462-466(1997). Kohno M.,et al.Biochem. Biophys. Res. Commun. 347:827-832(2006). Xu X.,et al.Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases. Kalnine N.,et al.Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases. Dunham A.,et al.Nature 428:522-528(2004).