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GPR18 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51957

Specification

GPR18 Antibody - Product Information

Application	**WB, ICC, E**
Primary Accession	Q14330
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**34 KDa**

GPR18 Antibody - Additional Information

Gene ID 2841

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

Dilution
WB~~1:1000
ICC~~N/A
E~~N/A

Format
0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage
Store at -20 °C.Stable for 12 months from date of receipt

GPR18 Antibody - 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:26195725, PubMed:<a href="http://www.uniprot.org/citations/27572937"

target="_blank">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)

GPR18 Antibody - 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

GPR18 Antibody - Images

GPR18 Antibody - 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.

GPR18 Antibody - 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).