

# GPR18 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51957

## Product Information

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Application	WB, ICC
Primary Accession	<a href="#">Q14330</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38134

## Additional Information

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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
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

## Protein Information

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Name	GPR18
Synonyms	GPCRW
Function	<p>G protein-coupled receptor (GPCR) that plays a role in diverse physiological processes particularly within the immune and nervous systems (PubMed:<a href="#">21732409</a>, PubMed:<a href="#">26195725</a>). 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:<a href="#">16844083</a>, PubMed:<a href="#">24762058</a>, PubMed:<a href="#">26195725</a>, PubMed:<a href="#">27572937</a>). Upon RvD2 binding, facilitates the resolution of inflammation, aiding in tissue repair and homeostasis. Mechanistically, RvD2 ligation initiates Gα<sub>i</sub> protein coupling, activation of cAMP-PKA signaling pathway and phosphorylation of STAT3, leading to RvD2-stimulated macrophage phagocytosis (PubMed:<a href="#">27994074</a>). Mediates NAGly-induced process of reorganization of actin filaments and induction of acrosomal exocytosis (PubMed:<a href="#">27572937</a>). 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) (CD8α<sup>+</sup>α<sup>+</sup> and CD8α<sup>+</sup>β<sup>+</sup> IELs) in small intestine</p>

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)

## Background

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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.

## References

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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).

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