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Anti-GPCRW / GPR18 Antibody (Cytoplasmic Domain)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17569

Product Information

Application	IHC-P
Primary Accession	Q14330
Predicted	Human, Rabbit, Monkey, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38134
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	2841
Alias Symbol	GPR18
Other Names	GPR18, GPCRW, G protein-coupled receptor 18, NAGly receptor, G-protein coupled receptor 18, N-arachidonyl glycine receptor
Target/Specificity	Human GPR18. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except ESYT3 (50%).
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-GPCRW / GPR18 Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

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: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)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.