

## PRODUCT INFORMATION

<b>Target</b>	GPR18
<b>Synonyms</b>	N-arachidonyl glycine receptor; NAGly receptor; G-protein coupled receptor 18 GPCR $\square$ GPCR $\square$ GPR18
<b>Description</b>	Human GPR18 full length protein-synthetic nanodisc
<b>Delivery</b>	6~8weeks
<b>Uniprot ID</b>	Q14330
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	GPCR,Transmembrane,Druggable Genome,
<b>Protein Pathways</b>	GPCRDB Other,
<b>Molecular Weight</b>	The human full length GPR18 protein has a MW of 38.1kDa
<b>Formulation &amp; Reconstitution</b>	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with pH lower than 6.5 in subsequent experiments.
<b>Storage &amp; Shipping</b>	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
<b>Background</b>	Receptor for endocannabinoid N-arachidonyl glycine (NAGly) (PubMed:16844083, PubMed:24762058, PubMed:27572937). However, conflicting results about the role of NAGly as an agonist are reported (PubMed:27018161). Can also be activated by plant-derived and synthetic cannabinoid agonists (PubMed:24762058). The activity of this receptor is mediated by G proteins which inhibit adenylyl cyclase (PubMed:16844083). May contribute to regulation of the immune system. Is required for normal 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). Plays a role in hypotensive responses, mediating reduction in intraocular and blood pressure (By similarity). Mediates NAGly-induced process of reorganization of actin filaments and induction of acrosomal exocytosis (PubMed:27572937).[UniProtKB/Swiss-Prot Function]
<b>Usage</b>	Research use only

