

## **GPR65 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58706

## **Specification**

# **GPR65** Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity <b>Purity</b> affinity purified by Protein A	WB, IHC-P, IHC-F, IF, E <u>O8IYL9</u> Rat Rabbit Polyclonal 37 KDa Liquid KLH conjugated synthetic peptide derived from human GPR65 51-120/337
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

GPR65 is a member of the G protein coupled receptor family. It has been reported in human in peripheral blood leukocytes, spleen, lymph node, and thymus. The ligand for this protein is psychosine. GPR65 may have a role in activation-induced cell death or differentiation of T cells.

## **GPR65** Polyclonal Antibody - Additional Information

Gene ID 8477

**Other Names** Psychosine receptor, G-protein coupled receptor 65, T-cell death-associated gene 8 protein, GPR65, TDAG8

Target/Specificity

Predominantly expressed in thymus, spleen, lymph nodes, small intestine, lung, placenta and peripheral blood leukocytes.

Dilution <span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_E">E~~N/A</span>



Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **GPR65** Polyclonal Antibody - Protein Information

Name GPR65 {ECO:0000303|PubMed:27287411, ECO:0000312|HGNC:HGNC:4517}

#### Function

Proton-sensing G-protein coupled receptor activated by extracellular pH, which is required to monitor pH changes and generate adaptive reactions (PubMed: <a href="http://www.uniprot.org/citations/15326175" target=" blank">15326175</a>, PubMed:<a href="http://www.uniprot.org/citations/15618224" target=" blank">15618224</a>, PubMed:<a href="http://www.uniprot.org/citations/20855608" target=" blank">20855608</a>, PubMed:<a href="http://www.uniprot.org/citations/33478938" target=" blank">33478938</a>, PubMed:<a href="http://www.uniprot.org/citations/37722051" target=" blank">37722051</a>, PubMed:<a href="http://www.uniprot.org/citations/39753132" target="\_blank">39753132</a>). Activated by an optimal pH of 7.4 (PubMed:<a href="http://www.uniprot.org/citations/39753132" target=" blank">39753132</a>). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide- binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (PubMed:<a href="http://www.uniprot.org/citations/15326175" target=" blank">15326175</a>, PubMed:<a href="http://www.uniprot.org/citations/15618224" target=" blank">15618224</a>, PubMed:<a href="http://www.uniprot.org/citations/37722051" target="\_blank">37722051</a>, PubMed:<a href="http://www.uniprot.org/citations/39753132" target="\_blank">39753132</a>). GPR65 is mainly coupled to G(s) G proteins and mediates activation of adenylate cyclase activity (PubMed:<a href="http://www.uniprot.org/citations/15618224" target=" blank">15618224</a>, PubMed:<a href="http://www.uniprot.org/citations/37722051" target=" blank">37722051</a>, PubMed: <a href="http://www.uniprot.org/citations/39753132" target=" blank">39753132</a>). May also act as a receptor for the glycosphingolipid psychosine (PSY) and several related glycosphingolipids (PubMed:<a href="http://www.uniprot.org/citations/11309421" target=" blank">11309421</a>, PubMed:<a href="http://www.uniprot.org/citations/15326175" target="\_blank">15326175</a>). Plays a role in immune response by maintaining lysosome function and regulating T-cell metabolism (PubMed: <a

href="http://www.uniprot.org/citations/27287411" target="\_blank">27287411</a>). Acts as a regulator of inflammation by mediating pH-sensing of extracellular acidification which takes place in inflamed tissues: activation regulates endo-lysosomal function of immune cells and T-cell metabolism (By similarity). Constitutively active in endosomes and stimulates adenylate cyclase production from endosomes independently from extracellular pH changes (PubMed:<a href="http://www.uniprot.org/citations/39753132" target=" blank">39753132</a>).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Note=Internalizes and localizes to early and late endosomes, from where GPR65 signals at steady state, irrespective of extracellular pH (PubMed:39753132). Changes in extracellular pH may relocalize receptor signaling to the cell membrane (PubMed:39753132).

## **Tissue Location**

Predominantly expressed in thymus, spleen, lymph nodes, small intestine, lung, placenta and peripheral blood leukocytes

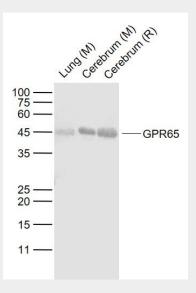


# **GPR65** Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **GPR65** Polyclonal Antibody - Images



Sample:

Lane 1: Lung (Mouse) Lysate at 40 ug Lane 2: Cerebrum (Mouse) Lysate at 40 ug Lane 3: Cerebrum (Rat) Lysate at 40 ug Primary: Anti-GPR65 (bs-7668R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 40 kD Observed band size: 44 kD