

GPR65 / TDAG8 Antibody (Cytoplasmic Domain)
Rabbit Polyclonal Antibody
Catalog # ALS10421

Specification

GPR65 / TDAG8 Antibody (Cytoplasmic Domain) - Product Information

Application	IHC-P
Primary Accession	Q8IYL9
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39kDa KDa
Dilution	IHC-P~~N/A

GPR65 / TDAG8 Antibody (Cytoplasmic Domain) - 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

Human GPR65. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

GPR65 / TDAG8 Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

GPR65 / TDAG8 Antibody (Cytoplasmic Domain) - 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:15326175, PubMed:15618224, PubMed:20855608, PubMed:33478938, PubMed:37722051, PubMed:39753132). Activated by an optimal pH of 7.4 (PubMed:39753132). 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 adenylyl cyclase (PubMed:15326175, PubMed:15618224, PubMed:37722051, PubMed:39753132). GPR65 is mainly coupled to G(s) G proteins and mediates activation of adenylyl cyclase activity (PubMed:15618224, PubMed:37722051, PubMed:39753132). May also act as a receptor for the glycosphingolipid psychosine (PSY) and several related glycosphingolipids (PubMed:11309421, PubMed:15326175). Plays a role in immune response by maintaining lysosome function and regulating T-cell metabolism (PubMed:27287411). 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 adenylyl cyclase production from endosomes independently from extracellular pH changes (PubMed:39753132).

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

Volume

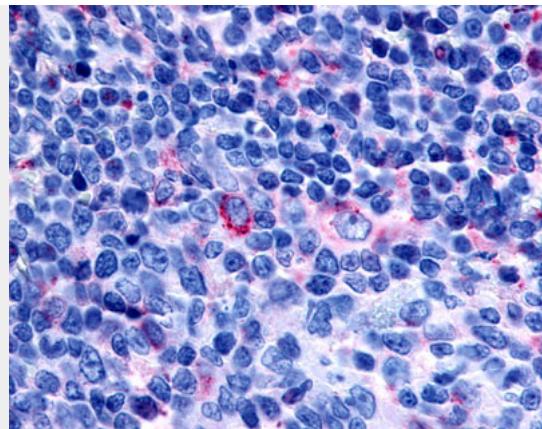
50 µl

GPR65 / TDAG8 Antibody (Cytoplasmic Domain) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GPR65 / TDAG8 Antibody (Cytoplasmic Domain) - Images



Anti-GPR65 antibody ALS10421 IHC of human tonsil.

GPR65 / TDAG8 Antibody (Cytoplasmic Domain) - Background

Receptor for the glycosphingolipid psychosine (PSY) and several related glycosphingolipids. May have a role in activation- induced cell death or differentiation of T-cells.

GPR65 / TDAG8 Antibody (Cytoplasmic Domain) - References

- Kyaw H.,et al.DNA Cell Biol. 17:493-500(1998).
- Heilig R.,et al.Nature 421:601-607(2003).
- Im D.-S.,et al.J. Cell Biol. 153:429-434(2001).