

GPR65 Rabbit pAb

GPR65 Rabbit pAb Catalog # AP58706

Product Information

Application WB Primary Accession Q8IYL9

Reactivity Rat, Human, Mouse

Host Rabbit
Clonality Polyclonal
Calculated MW 39333
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human GPR65

Epitope Specificity 51-120/337

Purity affinity purified by Protein A

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.

Additional Information

Gene ID 8477

Other Names G-protein coupled receptor 65, Psychosine receptor, T-cell death-associated

gene 8 protein, GPR65 (ECO:0000303 | PubMed:27287411,

ECO:0000312 | HGNC:HGNC:4517}

Target/Specificity Predominantly expressed in thymus, spleen, lymph nodes, small intestine,

lung, placenta and peripheral blood leukocytes.

Dilution WB=1:500-2000

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.

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 adenylate cyclase (PubMed: 15326175, PubMed: 15618224, PubMed: 37722051, PubMed:39753132). GPR65 is mainly coupled to G(s) G proteins and mediates activation of adenylate 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 adenylate 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).

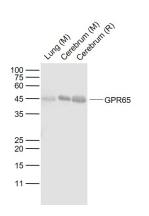
Tissue Location

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

Background

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.

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 (AP58706) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution

Predicted band size: 40 kD Observed band size: 44 kD

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