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GPR65 Rabbit pAb

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Catalog # AP58706

Product Information

Application	WB
Primary Accession	Q8IYL9
Reactivity	Human, Mouse, Rat
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.

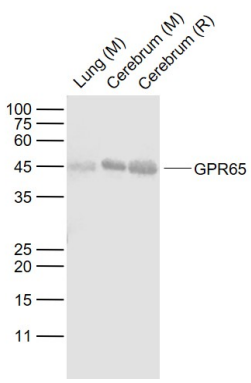
Protein Information

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