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GPR65 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58706

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q8IYL9
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39333

Additional Information

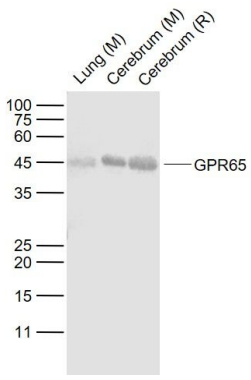
Gene ID	8477
Other Names	Psychosine receptor, G-protein coupled receptor 65, T-cell death-associated gene 8 protein, GPR65, TDAG8
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	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.

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

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