

OXGR1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20310b

Specification

OXGR1 Antibody (C-term) - Product Information

WB,E
<u>Q96P68</u>
Human
Rabbit
Polyclonal
Rabbit IgG
38251
309-337

OXGR1 Antibody (C-term) - Additional Information

Gene ID 27199

Other Names

2-oxoglutarate receptor 1, Alpha-ketoglutarate receptor 1, G-protein coupled receptor 80, G-protein coupled receptor 99, P2Y purinoceptor 15, P2Y15, P2Y-like GPCR, P2Y-like nucleotide receptor, OXGR1, GPR80, GPR99, P2RY15, P2Y15

Target/Specificity

This OXGR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 309-337 amino acids from the C-terminal region of human OXGR1.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

OXGR1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

OXGR1 Antibody (C-term) - Protein Information

Name OXGR1



Function G protein-coupled receptor for dicarboxylates and amino dicarboxylates (PubMed:<u>15141213</u>, PubMed:<u>36571463</u>, PubMed:<u>36919698</u>). Receptor for itaconate, a metabolite produced by myeloid lineages (PubMed:<u>36919698</u>). In the respiratory epithelium, couples the binding of itaconate to the activation of GNA11 and downstream intracellular Ca(2+) release, leading to mucocilliary clearance of airborne pathogens (PubMed:<u>36919698</u>). Receptor for leukotriene E4 (LTE4) produced by mast cells upon allergic inflammation. Binds with high affinity to LTE4 and elicits mucin release from pulmonary epithelium in response to airborne fungi allergens. Regulates mucin-producing goblet cell homeostasis (By similarity). Receptor for alpha-ketoglutarate produced by proximal tubule renal cells upon metabolic alkalosis. In an intrarenal paracrine signaling pathway, binds alpha-ketoglutarate and drives transepithelial salt reabsorption and bicarbonate secretion by SLC26A4/pendrin-positive intercalated cells (By similarity) (PubMed:<u>15141213</u>).

Cellular Location

Cell membrane; Multi-pass membrane protein. Note=Upon itaconate binding, internalizes via endocytosis in a beta-arrestin dependent manner

Tissue Location

Detected in kidney and, to a lower extent, in placenta. Not detected in brain tissues including the frontal cortex, caudate putamen, thalamus, hypothalamus, hippocampus or pons

OXGR1 Antibody (C-term) - 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>

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OXGR1 Antibody (C-term) - Images
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OXGR1 Antibody (C-term) (Cat. #AP20310b) western blot analysis in human placenta tissue



lysates (35ug/lane). This demonstrates the OXGR1 antibody detected the OXGR1 protein (arrow). **OXGR1 Antibody (C-term) - Background**

Receptor for alpha-ketoglutarate. Seems to act exclusively through a G(q)-mediated pathway (By similarity).