

OXGR1 / GPR99 Antibody

Rabbit mAb

Catalog # AP92922

Product Information

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|--------------------------|-------------------------------------|
| Application | WB, IF, FC, ICC |
| Primary Accession | Q96P68 |
| Reactivity | Rat, Human, Mouse |
| Clonality | Monoclonal |
| Other Names | GPR80; GPR99; Oxgr1; P2RY15; P2Y15; |
| Isotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 38251 |

Additional Information

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|-------------------------------------|---|
| Dilution | WB 1:500~1:2000 ICC/IF 1:50~1:200 FC 1:50 |
| Purification | Affinity-chromatography |
| Immunogen | A synthesized peptide derived from human OXGR1 / GPR99 |
| Description | Receptor for alpha-ketoglutarate. Seems to act exclusively through a G(q)-mediated pathway. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

Protein Information

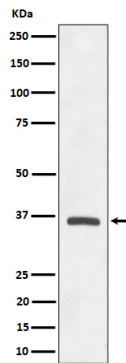
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|--------------------------|--|
| Name | OXGR1 |
| Function | G protein-coupled receptor for dicarboxylates and amino dicarboxylates (PubMed: 15141213 , PubMed: 36571463 , PubMed: 36919698). Receptor for itaconate, a metabolite produced by myeloid lineages (PubMed: 36919698). 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: 36919698). 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: 15141213). |
| 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

Images



Western blot analysis of OXGR1 / GPR99 expression in A549 cell lysate.

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