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GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain)

Rabbit Polyclonal Antibody
Catalog # ALS10459

Specification

GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain) - Product Information

Application	**IHC-P**
Primary Accession	Q96P68
Reactivity	**Human, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**38kDa KDa**
Dilution	**IHC-P~~N/A**

GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain) - 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
Human OXGR1. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain) - Protein Information

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 mucociliary 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

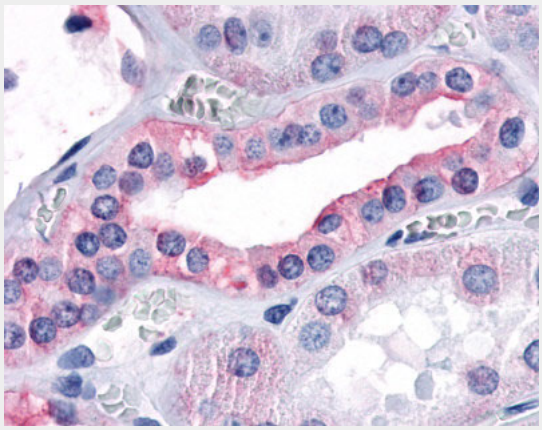
Volume
50 µl

GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain) - Images



Anti-OXGR1 antibody ALS10459 IHC of human kidney.

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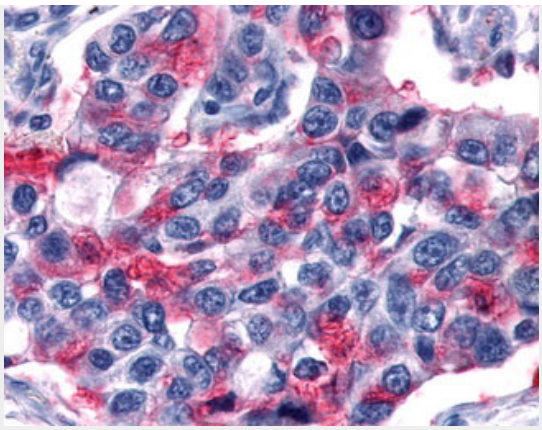

Anti-GPR80 / GPR99 / OXGR1 antibody IHC of human Lung, Non-Small Cell Carcinoma.

GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain) - Background

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

GPR80 / GPR99 / OXGR1 Antibody (Extracellular Domain) - References

Lee D.K.,et al.Gene 275:83-91(2001).
Wittenberger T.,et al.BMC Genomics 3:17-17(2002).
Takeda S.,et al.FEBS Lett. 520:97-101(2002).
Suwa M.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Bruess M.,et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.