10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

OXGR1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20310b

Product Information

Application	WB, E
Primary Accession	Q96P68
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40456
Calculated MW	38251
Antigen Region	309-337

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.

Protein Information

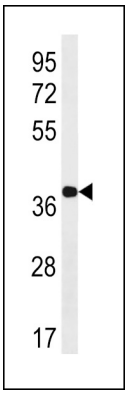
Name	OXGR1
Function	G protein-coupled receptor for dicarboxylates and amino dicarboxylates (PubMed:15141213, PubMed:36571463, PubMed:36919698). Receptor for

	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 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

Background

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

Images



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).