

PRODUCT INFORMATION



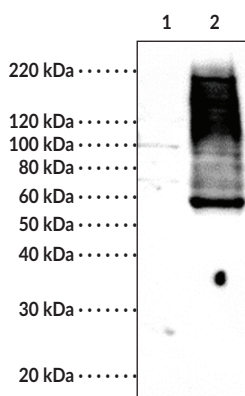
GPR99 (C-Term) Polyclonal Antibody

Item No. 27344

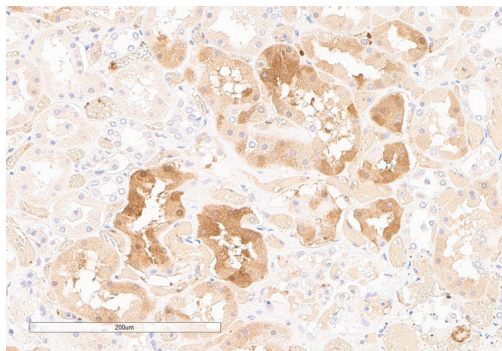
Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified antibody.
Synonyms:	α-Ketoglutarate Receptor 1, GPR80, G Protein-Coupled Receptor 80, G Protein-Coupled Receptor 99, OXGR1, 2-Oxoglutarate Receptor 1, P2Y15, P2Y-like GPCR, P2Y-like Nucleotide Receptor, P2Y Purinoceptor 15
Immunogen:	Synthetic peptide from the C-terminal region of human GPR99
Species Reactivity:	(+) Human; other species not tested
Uniprot No.:	Q96P68
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Rabbit
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Lane 1: Control lysate (12 µg)
Lane 2: GPR99 overexpression lysate (12 µg)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human kidney tissue after heat-induced antigen retrieval in pH 6.0 citrate buffer. After incubation with GPR99 (C-Term) Polyclonal Antibody (Item No. 27344) at a 1:200 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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Description

GPR99 is a G protein-coupled receptor (GPCR) that was originally identified as a purinergic receptor, P2Y₁₅.^{1,2} However, it is activated by leukotriene E₄ (LTE₄; Item No. 20410) in the low nanomolar range and by α-ketoglutarate in the high micromolar range.^{3,4} It is found in the CNS, kidney, epididymis, and other tissues in the mouse, as well as in human kidney, nasal turbinates, and lung, among other tissues.^{5,6} GPR99 knockout in mice prevents vascular leakage induced by LTE₄ and epithelial cell mucin release in mouse nasal mucosa induced by LTE₄ or *A. alternata*.³ In the kidney, under acid-base stress, it is involved with the regulation of carbonic acid and sodium chloride resorption through activation by α-ketoglutarate.⁵ GPR99 is also expressed in mouse retina, and axon growth is increased when it is activated by α-ketoglutarate in isolated mouse embryo retinal explants.⁷ Cayman's GPR99 (C-Term) Polyclonal Antibody can be used for Western blot and immunohistochemistry (IHC) applications. The antibody recognizes the C-terminus of GPR99 from human samples.

References

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2. Qi, A.D., Harden, T.K., and Nicholas, R.A. GPR80/99, proposed to be the P2Y₁₅ receptor activated by adenosine and AMP, is not a P2Y receptor. *Purinergic Signal*. **1(1)**, 67-74 (2004).
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