

SLC22A12 Rabbit pAb

SLC22A12 Rabbit pAb Catalog # AP94412

Specification

SLC22A12 Rabbit pAb - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity affinity purified by Protein A	WB, IHC-P, IHC-F, IF <u>Q96S37</u> Human Rabbit Polyclonal 61 KDa Liquid KLH conjugated synthetic peptide derived from human SLC22A12 101-200/553 IgG
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02%
SUBCELLULAR LOCATION	Proclin300 and 50% Glycerol. Cell membrane, Multi-pass membrane protein.
SIMILARITY	Belongs to the major facilitator (TC 2.A.1) superfamily. Organic cation transporter
SUBUNIT Post-translational modifications	(TC 2.A.1.19) family. Interacts with PDZK1. N-glycosylated. Contains several complex-type N-glycans.
DISEASE Important Note	Hypouricemia renal 1 (RHUC1) [MIM:220150]: A disorder characterized by impaired uric acid reabsorption at the apical membrane of proximal renal tubule cells, and high urinary urate excretion. Patients often appear asymptomatic, but may be subject to exercise-induced acute renal failure, chronic renal dysfunction and nephrolithiasis. Note=The disease is caused by mutations affecting the gene represented in this entry. This product as supplied is intended for
Rockground Descriptions	research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

The protein encoded by this gene is involved in the sodium-independent transport and excretion of organic anions, some of which are potentially toxic. The encoded protein is an integral membrane protein and is found mainly in the kidney and in the placenta, where it may act to prevent potentially harmful organic anions from reaching the fetus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]



SLC22A12 Rabbit pAb - Additional Information

Gene ID 116085

Other Names Solute carrier family 22 member 12, Organic anion transporter 4-like protein, Renal-specific transporter, RST {ECO:0000303|Ref.2}, Urate anion exchanger 1, URAT1, Urate:anion antiporter SLC22A12, SLC22A12 (HGNC:17989)

Target/Specificity Detected in placenta and kidney.

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

SLC22A12 Rabbit pAb - Protein Information

Name SLC22A12 (HGNC:17989)

Function

Electroneutral antiporter that translocates urate across the apical membrane of proximal tubular cells in exchange for monovalent organic or inorganic anions (PubMed:12024214, PubMed:22194875, PubMed:35144162, PubMed:35144162, PubMed:35462902). Involved in renal reabsorption of urate and helps maintaining blood levels of uric acid (PubMed:12024214, PubMed:22194875). Mediates urate uptake by an exchange with organic anions such as (S)-lactate and nicotinate, and inorganic anion Cl(-) (PubMed:<a href="http://www.uniprot.org/citations/12024214"

target="_blank">12024214). Other inorganic anions such as Br(-), I(-) and NO3(-) may also act as counteranions that exchange for urate (PubMed:12024214). Also mediates orotate tubular uptake coupled with nicotinate efflux and to a lesser extent with lactate efflux, therefore displaying a potential role in orotate renal reabsorption (PubMed:21350910). Orotate transport is Cl(-)-dependent (PubMed:21350910).

Cellular Location

Apical cell membrane; Multi-pass membrane protein



Tissue Location

Detected in kidney (at protein level). Detected in fetal and adult kidney. Detected in epithelial cells of proximal tubules in renal cortex.

SLC22A12 Rabbit pAb - 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>

SLC22A12 Rabbit pAb - Images



Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-SLC22A12 Polyclonal Antibody, Unconjugated(AP94412) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining





Sample: Hela Cell (Human) Lysate at 40 ug Primary: Anti-SLC22A12 (AP94412) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 61 kD Observed band size: 61 kD

SLC22A12 Rabbit pAb - Background

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