

SLC22A12 Rabbit pAb

SLC22A12 Rabbit pAb Catalog # AP94412

Product Information

Application WB, IHC-P, IHC-F, IF

Primary Accession

Reactivity

Host

Clonality

Calculated MW

Physical State

Q96S37

Human

Rabbit

Polyclonal

59630

Liquid

Immunogen KLH conjugated synthetic peptide derived from human SLC22A12

Epitope Specificity 101-200/553

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cell membrane, Multi-pass membrane protein.

SIMILARITY Belongs to the major facilitator (TC 2.A.1) superfamily. Organic cation

transporter (TC 2.A.1.19) family.

SUBUNIT Interacts with PDZK1.

Post-translational N-glycosylated. Contains several complex-type N-glycans. **modifications**

DISEASE

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.

Important Note This product as supplied is intended for 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]

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=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500

Format 0.01M TBS(pH7.4) with 1% BSA, 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.

Protein Information

Name SLC22A12 (<u>HGNC:17989</u>)

Function Electroneutral antiporter that translocates urate across the apical

membrane of proximal tubular cells in exchange for monovalent organic or inorganic anions (PubMed:<u>12024214</u>, PubMed:<u>22194875</u>, PubMed:<u>35144162</u>,

PubMed:<u>35462902</u>). Involved in renal reabsorption of urate and helps maintaining blood levels of uric acid (PubMed:<u>12024214</u>, PubMed:<u>22194875</u>).

Mediates urate uptake by an exchange with organic anions such as (S)-lactate and nicotinate, and inorganic anion Cl(-) (PubMed:12024214). Other inorganic anions such as Br(-), I(-) and NO3(-) may also act as counteranions that

exchange for urate (PubMed:<u>12024214</u>). 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

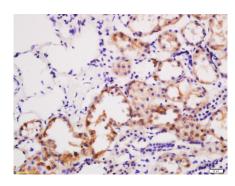
Tissue Location Detected in kidney (at protein level). Detected in fetal and adult kidney.

Detected in epithelial cells of proximal tubules in renal cortex.

Background

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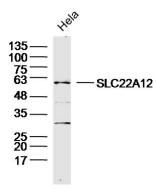
Images



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



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