

SLC22A7 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57670

Product Information

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

Primary Accession <u>Q9Y694</u>

Reactivity Rat, Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 60026
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human SLC22A7

Epitope Specificity 461-548/548

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 Basolateral cell membrane. Apical side of the renal tubule.

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

transporter (TC 2.A.1.19) family.

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 appears to be localized to the basolateral membrane of the kidney. Alternatively spliced transcript variants encoding different isoforms have been described.

[provided by RefSeq, Jul 2008]

Additional Information

Gene ID 10864

Other Names Solute carrier family 22 member 7, Novel liver transporter, Organic anion

transporter 2, hOAT2, SLC22A7, NLT, OAT2

Target/Specificity Expressed in liver and kidney.

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

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 SLC22A7 (HGNC:10971)

Synonyms NLT, OAT2

Function

[Isoform 2]: Functions as a Na(+)-independent bidirectional multispecific transporter (PubMed:11327718, PubMed:18216183, PubMed:21446918, PubMed: 28945155). Contributes to the renal and hepatic elimination of endogenous organic compounds from the systemic circulation into the urine and bile, respectively (PubMed: 11327718, PubMed: 25904762). Capable of transporting a wide range of purine and pyrimidine nucleobases, nucleosides and nucleotides, with cGMP, 2'deoxyguanosine and GMP being the preferred substrates (PubMed:11327718, PubMed:18216183, PubMed:26377792, PubMed:28945155). Functions as a pH- and chloride-independent cGMP bidirectional facilitative transporter that can regulate both intracellular and extracellular levels of cGMP and may be involved in cGMP signaling pathways (PubMed: 18216183, PubMed: 26377792). Mediates orotate/glutamate bidirectional exchange and most likely display a physiological role in hepatic release of glutamate into the blood (PubMed:21446918). Involved in renal secretion and possible reabsorption of creatinine (PubMed: 25904762, PubMed: 28945155). Able to uptake prostaglandin E2 (PGE2) and may contribute to PGE2 renal excretion (Probable). Also transports alpha-ketoglutarate and urate (PubMed: 11327718, PubMed: 26377792). Apart from the orotate/glutamate exchange, the counterions for the uptake of other SLC22A7/OAT2 substrates remain to be identified (PubMed: 26377792).

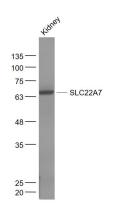
Cellular Location

[Isoform 2]: Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Localized to the basolateral side of the proximal tubules (PubMed:12023506, PubMed:25904762). Apical side of the renal tubule (PubMed:25904762).

Tissue Location

Mainly expressed in liver and kidney (PubMed:11327718, PubMed:18216183, PubMed:21446918, PubMed:25904762) In kidney, expressed in proximal tubular cells (PubMed:25904762). Also expressed in pancreas, small intestine, spinal cord, lung, brain and heart (PubMed:18216183). Expressed in fetal liver (PubMed:21446918)

Images



Sample:

Kidney (Mouse) Lysate at 40 ug

Primary: Anti- SLC22A7 (AP57670) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 60 kD Observed band size: 64 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.