

SLC43A1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51663

Specification

SLC43A1 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, ICC, E
075387
Human, Mouse, Rat
Rabbit
Polyclonal
61 KDa

SLC43A1 Antibody - Additional Information

Gene ID 8501

Other Names

Large neutral amino acids transporter small subunit 3, L-type amino acid transporter 3, Prostate cancer overexpressed gene 1 protein, Solute carrier family 43 member 1, SLC43A1 {ECO:0000312|EMBL:AAH016391}

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

SLC43A1 Antibody - Protein Information

Name SLC43A1 {ECO:0000312|EMBL:AAH01639.1}

Function

Uniport that mediates the transport of neutral amino acids such as L-leucine, L-isoleucine, L-valine, and L-phenylalanine (PubMed:12930836). The transport activity is sodium ions-independent, electroneutral and mediated by a facilitated diffusion (PubMed:12930836).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8BSM7}; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q8BSM7}; Multi-pass membrane protein. Note=Located in the apical plasma membrane of the podocyte foot processes (PubMed:19443642). Located in the plasma membrane of liver and skeletal muscle, and in the endoplasmic reticulum and in crystalline inclusions in pancreatic acinar cells (By similarity). {ECO:0000250|UniProtKB:Q8BSM7, ECO:0000269|PubMed:19443642}



Tissue Location

Ubiquitously expressed in fetus and adult (PubMed:9722952). Highest expression in adult pancreas, liver, skeletal muscle (PubMed:9722952, PubMed:12930836). In fetus, highest expression in liver and lower levels in kidney, and lung (PubMed:12930836) Exclusively expressed in the glomeruli along the glomerular capillary walls (PubMed:19443642).

SLC43A1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

SLC43A1 Antibody - Images

SLC43A1 Antibody - Background

Sodium-independent, high affinity transport of large neutral amino acids. Has narrower substrate selectivity compared to SLC7A5 and SLC7A8 and mainly transports branched-chain amino acids and phenylalanine. Plays a role in the development of human prostate cancer, from prostatic intraepithelial neoplasia to invasive prostate cancer.

SLC43A1 Antibody - References

Cole K.A., et al.Genomics 51:282-287(1998).
Babu E., et al.J. Biol. Chem. 278:43838-43845(2003).
Chuaqui R.F., et al.Urology 50:302-307(1997).
Skotheim R.I., et al.Cancer Res. 62:2359-2364(2002).