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Anti-SLC43A1 Antibody

Catalog # AP51663

Product Information

Application	WB, IF/IC
Primary Accession	O75387
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61477

Additional Information

Gene ID	8501
Other Names	LAT3; PB39; POV1; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SLC43A1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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, PubMed:26305885). The transport activity is sodium ions-independent, electroneutral and mediated by a facilitated diffusion (PubMed:12930836). Mediates the efflux of 3,3'-diiodo-L- thyronine (3,3'-T2) and 3-iodo-L-tyrosine (MIT) (PubMed:26305885).
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}

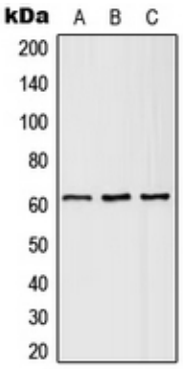
Tissue Location

Ubiquitously expressed in fetus and adult (PubMed:9722952). Highest expression in adult pancreas, liver, skeletal muscle (PubMed:12930836, PubMed:9722952). 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).

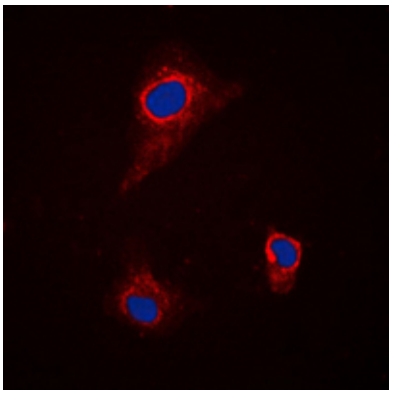
References

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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).

Images



Western blot analysis of SLC43A1 expression in HEK293T (A), SP2/0 (B), H9C2 (C) whole cell lysates. (Predicted band size: 61 kD; Observed band size: 61 kD)



Immunofluorescent analysis of SLC43A1 staining in H9C2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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