

# SLC43A1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51663

#### **Product Information**

Application WB, ICC Primary Accession 075387

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW61477

#### **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}

**Dilution** WB~~1:1000 ICC~~N/A

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

#### **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: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).

## **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.

### 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).

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