

## SLC7A8 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22256b

## **Specification**

#### SLC7A8 Antibody (C-Term) - Product Information

Application	WB, FC,E
Primary Accession	<u>Q9UHI5</u>
Other Accession	<u>Q5RAE3</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Calculated MW	58382

SLC7A8 Antibody (C-Term) - Additional Information

# Gene ID 23428

#### **Other Names**

Large neutral amino acids transporter small subunit 2, L-type amino acid transporter 2, hLAT2, Solute carrier family 7 member 8, SLC7A8, LAT2

### Target/Specificity

This SLC7A8 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 476-506 amino acids from human SLC7A8.

**Dilution** WB~~1:1000-1:2000 FC~~1:25

### Format

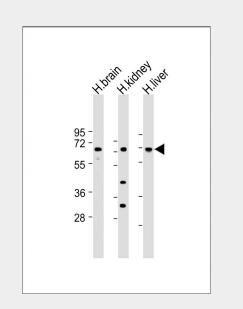
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### Storage

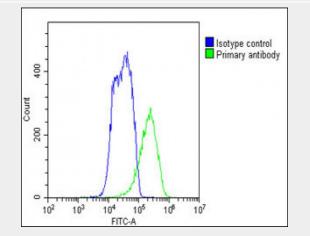
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

SLC7A8 Antibody (C-Term) is for research



All lanes : Anti-SLC7A8 Antibody (C-Term) at 1:1000-1:2000 dilution Lane 1: Human brain lysate Lane 2: Human kidney lysate Lane 3: Human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 58 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing HepG2 cells stained with AP22256b(green line). The cells were fixed with 2% paraformaldehyde 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the



use only and not for use in diagnostic or therapeutic procedures.

SLC7A8 Antibody (C-Term) - Protein Information

### Name SLC7A8

Synonyms LAT2

#### Function

Sodium-independent, high-affinity transport of small and large neutral amino acids such as alanine, serine, threonine, cysteine, phenylalanine, tyrosine, leucine, arginine and tryptophan, when associated with SLC3A2/4F2hc. Acts as an amino acid exchanger. Has higher affinity for L-phenylalanine than LAT1 but lower affinity for glutamine and serine. L-alanine is transported at physiological concentrations. Plays a role in basolateral (re)absorption of neutral amino acids. Involved in the uptake of methylmercury (MeHg) when administered as the L-cysteine or D,L-homocysteine complexes, and hence plays a role in metal ion homeostasis and toxicity. Involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO) across the transmembrane. Plays an essential role in the reabsorption of neutral amino acids from the epithelial cells to the bloodstream in the kidney.

### **Cellular Location**

Cytoplasm. Basolateral cell membrane; Multi-pass membrane protein. Note=Localized to the cytoplasm when expressed alone but when coexpressed with SLC3A2/4F2hc, is localized to the plasma membrane. Colocalized with SLC3A2/4F2hc at the basolateral membrane of kidney cortex proximal tubules and small intestine epithelia of the villi

#### **Tissue Location**

Strongest expression is observed in kidney and moderate expression in placenta and brain, followed by liver, prostate, testis, ovary, lymph node, thymus, spleen, skeletal muscle and heart Also expressed in fetal liver as well as in the retinal pigment epithelial cell line ARPE-19 and the intestinal epithelial cell line Caco-2. antibody (AP22256b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 $\mu$ g/1 $\times$ 10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

## SLC7A8 Antibody (C-Term) - Background

Sodium-independent, high-affinity transport of small and large neutral amino acids such as alanine, serine, threonine, cysteine, phenylalanine, tyrosine, leucine, arginine and tryptophan, when associated with SLC3A2/4F2hc. Acts as an amino acid exchanger. Has higher affinity for L-phenylalanine than LAT1 but lower affinity for glutamine and serine. L-alanine is transported at physiological concentrations. Plays a role in basolateral (re)absorption of neutral amino acids. Involved in the uptake of methylmercury (MeHg) when administered as the L-cysteine or D,L-homocysteine complexes, and hence plays a role in metal ion homeostasis and toxicity. Involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO) across the transmembrane. Plays an essential role in the reabsorption of neutral amino acids from the epithelial cells to the bloodstream in the kidney.

### SLC7A8 Antibody (C-Term) - References

Pineda M., et al.J. Biol. Chem. 274:19738-19744(1999). Rossier G., et al.J. Biol. Chem. 274:34948-34954(1999). Borsani G., et al.Nat. Genet. 21:297-301(1999). Park S.Y., et al.Arch. Pharm. Res. 28:421-432(2005). Li W.B., et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.



# SLC7A8 Antibody (C-Term) - Protocols

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

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