

# Slc22A17 Antibody

Catalog # ASC10713

### **Specification**

# Slc22A17 Antibody - Product Information

Application WB, IF Primary Accession O8WUG5

Other Accession
Reactivity
Host
Reactivity

Clonality Polyclonal Isotype IgG

Calculated MW Predicted: 59 kDa

Observed: 61 kDa KDa

Application Notes

Slc22A17 antibody can be used for detection of Slc22A17 by Western blot at 0.5 µg/mL. Antibody can also be used for

immunoflourescence starting at 20 µg/mL.

### Slc22A17 Antibody - Additional Information

Gene ID **51310** 

Target/Specificity SLC22A17;

### **Reconstitution & Storage**

Slc22A17 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

### **Precautions**

Slc22A17 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Slc22A17 Antibody - Protein Information**

Name SLC22A17

Synonyms BOCT, BOIT

#### **Function**

Cell surface receptor for LCN2 (24p3) that plays a key role in iron homeostasis and transport. Able to bind iron-bound LCN2 (holo- 24p3), followed by internalization of holo-24p3 and release of iron, thereby increasing intracellular iron concentration and leading to inhibition of apoptosis. Also binds iron-free LCN2 (apo-24p3), followed by internalization of apo-24p3 and its association with an intracellular siderophore, leading to iron chelation and iron transfer to the extracellular medium, thereby reducing intracellular iron concentration and resulting in apoptosis (By similarity).



### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Vacuole membrane; Multi-pass membrane protein. Note=Upon LCN2-binding, it is internalized

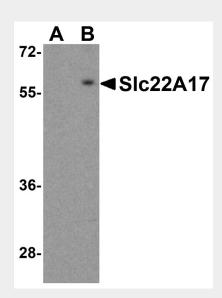
**Tissue Location** Expressed in brain.

# **SIc22A17 Antibody - Protocols**

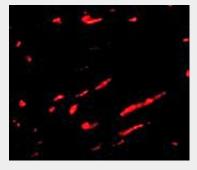
Provided below are standard protocols that you may find useful for product applications.

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

# SIc22A17 Antibody - Images

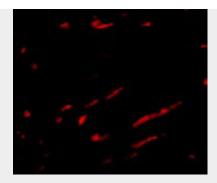


Western blot analysis of Slc22A17 in SK-N-SH lysate with Slc22A17 antibody at 0.5  $\mu$ g/mL in (A) the presence and (B) the absence of blocking peptide.



Immunofluorescence of Slc22A17 in rat kidney tissue tissue with Slc22A17 antibody at 20 μg/mL.





Immunofluorescence of Slc22A17 in Rat Kidney tissue with Slc22A17 antibody at 20 μg/mL.

### Slc22A17 Antibody - Background

Slc22A17 Antibody: The Slc22 family of organic anion and cation transporters (OATs, OCTs, OCTNs) are transmembrane proteins expressed predominantly in kidney and liver. Each contain 12 predicted alpha-helical transmembrane domains (TMDs) and one large extracellular loop between TMDs 1 and 2. Transporters of the SLC22 family function in different ways such as uniporters that mediate facilitated diffusion in either direction (OCTs), as anion exchangers (OAT1, OAT3 and URAT1), and as Na(+)/l-carnitine cotransporter (OCTN2). Slc22 family members participate in the absorption and/or excretion of drugs, xenobiotics, and endogenous compounds in intestine, liver, and kidney, and perform homeostatic functions in brain and heart. Mutations in the Slc22 family may cause specific diseases such as primary systemic carnitine deficiency or idiopathic renal hypouricemia and may change drug absorption or excretion. Recent studies show the expression of Slc22A17 as receptor for Lipocalin 2 is relatively high in hematopoietic stem cells.

# SIc22A17 Antibody - References

Koepsell H and Endou H. The SLC22 drug transporter family. Pflugers Arch. 2004; 447:666-76. Rizwan AN and Burckhardt G. Organic anion transporters of the SLC22 family: biopharmaceutical, physiological, and pathological roles. Pharm. Res. 2007; 24:450-70.

Miharada K, Hiroyama T, Sudo K, et. al. Lipocalin 2-mediated growth suppression is evident in human erythroid and monocyte/macrophage lineage cells. J. Cell Physiol. 2008; 215:526-37. Devireddy LR, Gazin C, Zhu X, et al. A cell-surface receptor for lipocalin 24p3 selectively mediates apoptosis and iron uptake. Cell 2005; 123:1293-305.