

#### **ZNT1** Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP53375

### **Specification**

### **ZNT1 Antibody - Product Information**

Application WB
Primary Accession Q9Y6M5
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 55 KDa
Antigen Region 204-253

## **ZNT1** Antibody - Additional Information

**Gene ID 7779** 

Dilution WB~~ 1:500

### **Format**

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol

#### Storage

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

### **ZNT1** Antibody - Protein Information

## Name SLC30A1 (<u>HGNC:11012</u>)

#### **Function**

Zinc ion:proton antiporter that could function at the plasma membrane mediating zinc efflux from cells against its electrochemical gradient protecting them from intracellular zinc accumulation and toxicity (PubMed:<a href="http://www.uniprot.org/citations/31471319" target="\_blank">31471319</a>/a>). Alternatively, could prevent the transport to the plasma membrane of CACNB2, the L-type calcium channels regulatory subunit, through a yet to be defined mechanism. By modulating the expression of these channels at the plasma membrane, could prevent calcium and zinc influx into cells. By the same mechanism, could also prevent L-type calcium channels-mediated heavy metal influx into cells (By similarity). In some cells, could also function as a zinc ion:proton antiporter mediating zinc entry into the lumen of cytoplasmic vesicles. In macrophages, can increase zinc ions concentration into the lumen of cytoplasmic vesicles containing engulfed bacteria and could help inactivate them (PubMed:<a href="http://www.uniprot.org/citations/32441444" target="\_blank">32441444</a>).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane



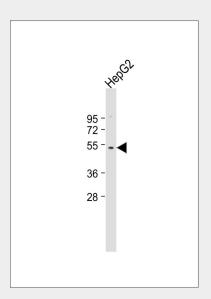
protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Note=Localization to the plasma membrane is regulated by cellular zinc status. Recruitment to the plasma membrane from an internal pool is stimulated by zinc while in absence of zinc the plasma membrane pool is endocytosed and degraded (PubMed:31471319). Localizes to the basolateral surface of enterocytes (By similarity). Localizes to zinc-containing intracellular vesicles in macrophages (PubMed:32441444). {ECO:0000250|UniProtKB:Q62720, ECO:0000269|PubMed:31471319, ECO:0000269|PubMed:32441444}

### **ZNT1** Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **ZNT1** Antibody - Images



Anti-ZNT1 Antibody at 1:500 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

#### ZNT1 Antibody - Background

May be involved in zinc transport out of the cell.

# **ZNT1 Antibody - References**

Nanji M.S.,et al.Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases. Goshima N.,et al.Submitted (JUL-2008) to the EMBL/GenBank/DDBJ databases. Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Inoue H.,et al.Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.





Olsen J.V., et al. Cell 127:635-648(2006).