

SLC30A1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50851

Specification

SLC30A1 Antibody - Product Information

Application	WB
Primary Accession	<u>Q9Y6M5</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55 KDa
Antigen Region	211-239

SLC30A1 Antibody - Additional Information

Gene ID 7779

Other Names Zinc transporter 1, ZnT-1, Solute carrier family 30 member 1, SLC30A1, ZNT1

Dilution WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20°C

SLC30A1 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:http://www.uniprot.org/citations/31471319

target="_blank">31471319). 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:32441444).



Cellular Location

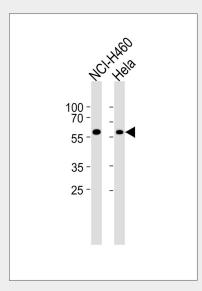
Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Note=Localization to the plasma membrane is regulated by cellular zinc status. Recruitment to the plasma membrane from an internal pool is stimulated 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}

SLC30A1 Antibody - 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
- <u>Cell Culture</u>

SLC30A1 Antibody - Images



Western blot analysis of lysates from NCI-H460,Hela cell line (from left to right),using SLC30A1 Antibody, was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.

SLC30A1 Antibody - Background

May be involved in zinc transport out of the cell.

SLC30A1 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).