

SLC30A1 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP13972b**Specification**

SLC30A1 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q9Y6M5](#)**SLC30A1 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 7779

Other Names

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13972b was selected from the C-term region of SLC30A1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SLC30A1 Antibody (C-term) Blocking peptide - Protein InformationName SLC30A1 ([HGNC:11012](#))**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: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 (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

SLC30A1 Antibody (C-term) Blocking peptide - Images**SLC30A1 Antibody (C-term) Blocking peptide - Background**

SLC30A1 may be involved in zinc transport out of the cell.

SLC30A1 Antibody (C-term) Blocking peptide - References

Urani, C., et al. Toxicol In Vitro 24(2):370-374(2010)Beharier, O., et al. Ann. N. Y. Acad. Sci. 1188, 87-95 (2010) :Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010)Hosgood, H.D. III, et al. Respir Med 103(12):1866-1870(2009)Levy, S., et al. J. Biol. Chem. 284(47):32434-32443(2009)