

SLC39A6 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP16336a

Specification

SLC39A6 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

013433

SLC39A6 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 25800

Other Names

Zinc transporter ZIP6, Estrogen-regulated protein LIV-1, Solute carrier family 39 member 6, Zrt-and Irt-like protein 6, ZIP-6, SLC39A6, LIV1, ZIP6

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.

SLC39A6 Antibody (Center) Blocking Peptide - Protein Information

Name SLC39A6 (HGNC:18607)

Synonyms LIV1, ZIP6

Function

Zinc-influx transporter which plays a role in zinc homeostasis and in the induction of epithelial-to-mesenchymal transition (EMT) (PubMed:27274087, PubMed:18272141, PubMed:21422171, PubMed:34394081, PubMed:23919497, PubMed:12839489). When associated with SLC39A10, the heterodimer formed by SLC39A10 and SLC39A6 mediates cellular zinc uptake to trigger cells to undergo epithelial- to- mesenchymal transition (EMT) (PubMed:27274087). The SLC39A10-SLC39A6 heterodimer also controls NCAM1 phosphorylation and its integration into focal adhesion complexes during EMT (By similarity). Zinc influx inactivates GSK3B, enabling unphosphorylated SNAI1 in the nucleus to down-regulate adherence genes such as CDH1, causing loss of cell adherence (PubMed:<a href="http://www.uniprot.org/citations/23919497"



target="_blank">23919497). In addition, the SLC39A10-SLC39A6 heterodimer plays an essentiel role in initiating mitosis by importing zinc into cells to initiate a pathway resulting in the onset of mitosis (PubMed:32797246). Participates in the T-cell receptor signaling regulation by mediating cellular zinc uptake into activated lymphocytes (PubMed:30552163, PubMed:21422171, PubMed:34394081). Regulates the zinc influx necessary for proper meiotic progression to metaphase II (MII) that allows the oocyte-to-egg transition (PubMed:25143461).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell projection, lamellipodium membrane; Multi-pass membrane protein. Membrane raft; Multi-pass membrane protein. Apical cell membrane {ECO:0000250|UniProtKB:Q4V887} Note=Localizes to lipid rafts in T cells and is recruited into the immunological synapse in response to TCR stimulation (PubMed:34394081) In the choroid plexus is limited to the apical membrane in epithelial cells (By similarity). {ECO:0000250|UniProtKB:Q4V887, ECO:0000269|PubMed:34394081}

Tissue Location

Highly expressed in the breast, prostate, placenta, kidney, pituitary and corpus callosum (PubMed:12839489). Weakly expressed in heart and intestine. Also highly expressed in cells derived from an adenocarcinoma of the cervix and lung carcinoma (PubMed:12839489).

SLC39A6 Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

SLC39A6 Antibody (Center) Blocking Peptide - Images

SLC39A6 Antibody (Center) Blocking Peptide - Background

Zinc is an essential cofactor for hundreds of enzymes. It is involved in protein, nucleic acid, carbohydrate, and lipidmetabolism, as well as in the control of gene transcription, growth, development, and differentiation. SLC39A6 belongs to asubfamily of proteins that show structural characteristics of zinctransporters (Taylor and Nicholson, 2003 [PubMed12659941]).

SLC39A6 Antibody (Center) Blocking Peptide - References

Lopez, V., et al. Exp. Cell Res. 316(3):366-375(2010)Ma, X., et al. Mol. Cancer Ther. 8(11):3108-3116(2009)Unno, J., et al. Int. J. Oncol. 35(4):813-821(2009)French, D., et al. Blood 113(19):4512-4520(2009)Shen, H., et al. Mol. Biol. Rep. 36(4):653-659(2009)