

## SLC39A6 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16336a

#### Specification

### SLC39A6 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q13433</u> <u>NP\_036451.3</u>, <u>NP\_001092876.1</u> Human Rabbit Polyclonal Rabbit IgG 85047 437-466

#### SLC39A6 Antibody (Center) - Additional Information

Gene ID 25800

**Other Names** 

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

Target/Specificity

This SLC39A6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 437-466 amino acids from the Central region of human SLC39A6.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SLC39A6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### SLC39A6 Antibody (Center) - Protein Information

Name SLC39A6 (<u>HGNC:18607</u>)



## 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:<u>12839489</u>, PubMed:<u>18272141</u>, PubMed:<u>21422171</u>, PubMed:<u>23919497</u>, PubMed:<u>27274087</u>, PubMed:<u>34394081</u>). 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:<u>27274087</u>). 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:<u>23919497</u>). 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:<u>32797246</u>). Participates in the T-cell receptor signaling regulation by mediating cellular zinc uptake into activated lymphocytes (PubMed:<u>21422171</u>, PubMed:<u>30552163</u>, PubMed:<u>34394081</u>). Regulates the zinc influx necessary for proper meiotic progression to metaphase II (MII) that allows the oocyte-to-egg transition (PubMed:<u>25143461</u>).

#### **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:000250|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) - 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>

SLC39A6 Antibody (Center) - Images





SLC39A6 Antibody (Cat. #AP16336a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the SLC39A6 antibody detected the SLC39A6 protein (arrow).

## SLC39A6 Antibody (Center) - Background

Zinc is an essential cofactor for hundreds of enzymes. It is involved in protein, nucleic acid, carbohydrate, and lipid metabolism, as well as in the control of gene transcription, growth, development, and differentiation. SLC39A6 belongs to a subfamily of proteins that show structural characteristics of zinc transporters (Taylor and Nicholson, 2003 [PubMed 12659941]).

# SLC39A6 Antibody (Center) - 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)