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SLC39A6 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16336a

Product Information

Application	WB, E
Primary Accession	Q13433
Other Accession	NP_036451.3, NP_001092876.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36339
Calculated MW	85047
Antigen Region	437-466

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
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.

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:12839489, PubMed:18272141, PubMed:21422171, PubMed:23919497, PubMed:27274087, PubMed:34394081). 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:23919497). In addition, the SLC39A10-SLC39A6 heterodimer plays an essential 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:21422171, PubMed:30552163, 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).

Background

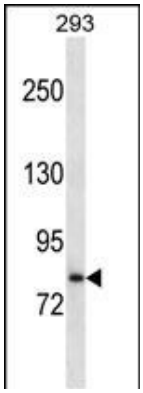
Zinc is an essential cofactor for hundreds of enzymes. It is involved in protein, nucleic acid, carbohydrate, and lipid metabolism, as well as in the control of gene transcription, growth, development, and differentiation. SLC39A6 belongs to a subfamily of proteins that show structural characteristics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

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)

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).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.