

SLC39A5 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP17503c**Specification**

SLC39A5 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q6ZMH5](#)**SLC39A5 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 283375**Other Names**

Zinc transporter ZIP5, Solute carrier family 39 member 5, Zrt- and Irt-like protein 5, ZIP-5, SLC39A5, ZIP5

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.

SLC39A5 Antibody (Center) Blocking Peptide - Protein Information**Name** SLC39A5 ([HGNC:20502](#))**Function**

Uniporter that transports zinc(2+) into polarized cells of enterocytes, pancreatic acinar and endoderm cells across the basolateral membrane and participates, notably, in zinc excretion from the intestine by the uptake of zinc from the blood into the intestine (By similarity). The transport mechanism is temperature- and concentration-dependent and saturable (By similarity). In addition, is also a high affinity copper transporter in vitro (PubMed:36454509). Also may regulate glucose-stimulated insulin secretion (GSIS) in islets primarily through the zinc-activated SIRT1-PPARGC1A axis (By similarity). Could regulate the BMP/TGF-beta (bone morphogenetic protein/transforming growth factor-beta) signaling pathway and modulates extracellular matrix (ECM) proteins of the sclera (PubMed:24891338). Plays a role in eye development (PubMed:24891338).

Cellular Location

Basolateral cell membrane {ECO:0000250|UniProtKB:Q9D856}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9D856}. Note=Localized to the basolateral surfaces of enterocytes, pancreatic acinar and endoderm cells. During zinc deficiency diet, the basolateral cell membrane

localization is lost in the intestine, the visceral yolk sac and acinar cell. During zinc repletion, is relocalized to the basolateral membrane of enterocytes, visceral endoderm cells and pancreatic acinar cells. Zinc can regulate the turnover of protein at the membrane. During zinc deficiency, is internalized and degraded in enterocytes, acinar cells and endoderm cells. Endocytosed through the endolysosomal degradation pathway RAB5A pathway. {ECO:0000250|UniProtKB:Q9D856}

Tissue Location

Expressed in liver, kidney, pancreas, small intestine, colon, spleen, fetal liver and fetal kidney

SLC39A5 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SLC39A5 Antibody (Center) Blocking Peptide - Images**SLC39A5 Antibody (Center) Blocking Peptide - 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. SLC39A5 belongs to a subfamily of proteins that show structural characteristics of zinc transporters (Taylor and Nicholson, 2003 [PubMed12659941]).

SLC39A5 Antibody (Center) Blocking Peptide - References

Wang, F., et al. J. Biol. Chem. 279(49):51433-51441(2004) Taylor, K.M., et al. Biochem. J. 375 (PT 1), 51-59 (2003) : Taylor, K.M., et al. Biochim. Biophys. Acta 1611 (1-2), 16-30 (2003) :