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SLC39A7 Antibody(Center) Blocking Peptide

Synthetic peptide
Catalog # BP16569c

Specification

SLC39A7 Antibody(Center) Blocking Peptide - Product Information

Primary Accession Q92504

SLC39A7 Antibody(Center) Blocking Peptide - Additional Information

Gene ID 7922

Other Names
Zinc transporter SLC39A7, Histidine-rich membrane protein Ke4, Really interesting new gene 5 protein, Solute carrier family 39 member 7, Zrt-, Irt-like protein 7, ZIP7, SLC39A7, HKE4, RING5

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.

SLC39A7 Antibody(Center) Blocking Peptide - Protein Information

Name SLC39A7

Synonyms HKE4 {ECO:0000303|PubMed:14525538}, RING

Function
Transports Zn(2+) from the endoplasmic reticulum (ER)/Golgi apparatus to the cytosol, playing an essential role in the regulation of cytosolic zinc levels (PubMed:14525538, PubMed:15705588, PubMed:28205653, PubMed:29980658). Acts as a gatekeeper of zinc release from intracellular stores, requiring post-translational activation by phosphorylation, resulting in activation of multiple downstream pathways leading to cell growth and proliferation (PubMed:22317921, PubMed:28205653, PubMed:29980658). Has an essential role in B cell development and is required for proper B cell receptor signaling (PubMed:30718914). Plays an important role in maintaining intestinal epithelial homeostasis and skin dermis development by regulating ER function (By similarity). Controls cell

signaling pathways involved in glucose metabolism in skeletal muscle (By similarity). Has a protective role against ER stress in different biological contexts (PubMed:29980658, PubMed:30237509). Mediates Zn(2+)-induced ferroptosis (PubMed:33608508).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus, cis-Golgi network membrane; Multi-pass membrane protein

Tissue Location
Widely expressed.

SLC39A7 Antibody(Center) Blocking Peptide - Protocols

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

- Blocking Peptides

SLC39A7 Antibody(Center) Blocking Peptide - Images

SLC39A7 Antibody(Center) Blocking Peptide - Background

Zinc is an essential cofactor for more than 50 classes ofenzymes. It is involved in protein, nucleic acid, carbohydrate, andlipid metabolism, as well as in the control of gene transcription,growth, development, and differentiation. Zinc cannot passivelydiffuse across cell membranes and requires specific transporters,such as SLC39A7, to enter the cytosol from both the extracellularenvironment and from intracellular storage compartments.[suppliedby OMIM].

SLC39A7 Antibody(Center) Blocking Peptide - References

Ucisik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010)Bailey, S.D., et al. Diabetes Care (2010) In press :Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) :