

SLC39A5 Rabbit pAb

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Catalog # AP57679

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q6ZMH5
Predicted	Rat, Cat, Dog, Human, Mouse, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56461
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SLC39A5
Epitope Specificity	21-100/540
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Basolateral cell membrane.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene belongs to the ZIP family of zinc transporters that transport zinc into cells from outside, and play a crucial role in controlling intracellular zinc levels. Zinc is an essential cofactor for many enzymes and proteins involved in gene transcription, growth, development and differentiation. Mutations in this gene have been associated with autosomal dominant high myopia (MYP24). Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2014]

Additional Information

Gene ID	283375
Other Names	Zinc transporter ZIP5, Solute carrier family 39 member 5, Zrt- and Irt-like protein 5, SLC39A5 (HGNC:20502)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Background

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