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SLC39A4 Rabbit pAb

Catalog # AP99608

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q6P5W5
Other Accession	Q6P5W5
Reactivity	Rat, Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68408
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SLC39A4
Epitope Specificity	281-380/647
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the ZIP transporter (TC 2.A.5) family.
DISEASE	Acrodermatitis enteropathica, zinc-deficiency type (AEZ)
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the zinc/iron-regulated transporter-like protein (ZIP) family. The encoded protein localizes to cell membranes and is required for zinc uptake in the intestine. Mutations in this gene result in acrodermatitis enteropathica. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2013]

Additional Information

Gene ID	55630
Other Names	AEZ; AWMS2; ZIP4; 1600025H15Rik; S39A4_HUMAN; SLC39A4; Solute carrier family 39 member 4; Zrt- and Irt-like protein 4 (ZIP-4); S39A4_MOUSE; Activated in W/Wv mouse stomach 2 (mAWMS2); acrodermatitis enteropathica, zinc-deficiency type; solute carrier family 39 (zinc transporter), member 4; zinc transporter 4; ZRT/IRT-like protein 4; Zinc transporter ZIP4
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	SLC39A4 (HGNC:17129)
Synonyms	ZIP4
Function	Selective transporter that mediates the uptake of Zn(2+) (PubMed: 17202136, PubMed:22242765, PubMed:27321477, PubMed:28875161, PubMed:31164399, PubMed:31914589, PubMed:31979155, PubMed:33837739, PubMed:36473915). Plays an essential role for dietary zinc uptake from small intestine (By similarity). The Zn(2+) uniporter activity is regulated by zinc availability (PubMed:17202136, PubMed:32348750). Also exhibits polyspecific binding and transport of Cu(2+), Cd(2+) and possibly Ni(2+) but at higher concentrations (PubMed:22242765, PubMed:31914589).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A0H3LM39}. Recycling endosome membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A0H3LM39}. Apical cell membrane {ECO:0000250|UniProtKB:Q78IQ7}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A0H3LM39}. Note=Colocalized with TFRC in the recycling endosomes. Cycles between endosomal compartments and the plasma membrane in response to Zn(2+) availability. Zn(2+) deficiency promotes accumulation of SLC39A4 on the surface membrane, whereas high extracellular Zn(2+) levels induce internalization of SLC39A4, but also trigger drastic removal of cellular SLC39A4 via proteasomal and lysosomal degradation pathways. {ECO:0000250|UniProtKB:Q78IQ7, ECO:0000269|PubMed:17202136, ECO:0000269|PubMed:32348750}
Tissue Location	Highly expressed in kidney, small intestine, stomach, colon, jejunum and duodenum.

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