10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLC39A7 Rabbit pAb

Catalog # AP97978

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q92504
Other Accession	Q92504
Reactivity	Rat, Mouse
Predicted	Pig, Human, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50118
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SLC39A7
Epitope Specificity	201-300/469
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. KE4/Catsup subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Zinc is an essential cofactor for more than 50 classes of enzymes and is involved in protein, nucleic acid, carbohydrate, and lipid metabolism, plus the control of gene transcription, growth, development, and differentiation. Zinc cannot passively diffuse across cell membranes and requires specific transporters, such as SLC39A7, to enter the cytosol from both the extracellular environment and from intracellular storage compartments.

Additional Information

Gene ID	7922
Other Names	AGM9; D6S115E; D6S2244E; H2-KE4; HKE4; KE4; RING5; ZIP7; H-2Ke4; Ke-4; RT1-Ke4; Rt1Ke4; S39A7_HUMAN; SLC39A7; Histidine-rich membrane protein Ke4; Really interesting new gene 5 protein; Solute carrier family 39 member 7; Zrt-, Irt-like protein 7 (ZIP7); S39A7_MOUSE; HLA class II region expressed gene KE4; solute carrier family 39 (zinc transporter), member 7; zinc transporter 7; ZRT/IRT-like protein 7
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	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.

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