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Anti-ZIP7 Antibody

Catalog # AP51886

Product Information

Application	WB, IF/IC
Primary Accession	Q92504
Reactivity	Human, Mouse, Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50118

Additional Information

Gene ID	7922
Other Names	HKE4; RING5; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ZIP7. The exact sequence is proprietary.
Dilution	WB~~ 1:4000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

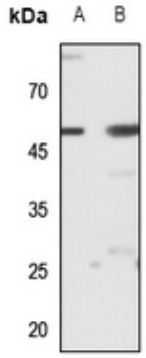
Name	SLC39A7
Synonyms	HKE4 {ECO:0000303|PubMed:14525538}, RING
Function	Transports Zn(2+) from the endoplasmic reticulum (ER)/Golgi apparatus to the cytosol, playing an essential role in the regulation of cytosolic zinc levels (PubMed:14525538, PubMed:15705588, PubMed:28205653, PubMed:29980658). Acts 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.

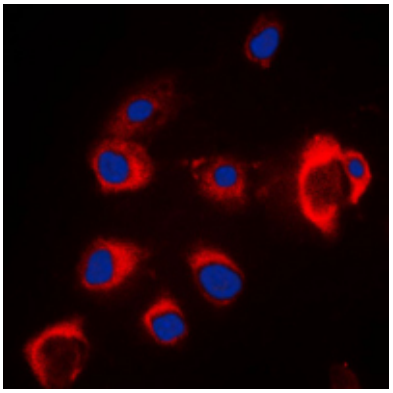
References

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Mungall A.J.,et al.Nature 425:805-811(2003).
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Taylor K.M.,et al.Biochem. J. 377:131-139(2004).

Images



Western blot analysis of ZIP7 expression in mouse kidney (A), rat kidney (B) whole cell lysates. (Predicted band size: 50 kD; Observed band size: 50 kD)



Immunofluorescent analysis of ZIP7 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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