

ZIP10 Antibody

Catalog # ASC11251

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9ULF5
Other Accession	EAW70116 , 149046180
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	94132
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ZIP10 antibody can be used for detection of ZIP10 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	57181
Other Names	Zinc transporter ZIP10, Solute carrier family 39 member 10, Zrt- and Irt-like protein 10, ZIP-10, SLC39A10, KIAA1265, ZIP10
Target/Specificity	Slc39a10;
Reconstitution & Storage	ZIP10 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	ZIP10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC39A10 (HGNC:20861)
Synonyms	KIAA1265, ZIP10
Function	Zinc-influx transporter (PubMed: 17359283 , PubMed: 27274087 , PubMed: 30520657). When associated with SLC39A6, the heterodimer formed by SLC39A10 and SLC39A6 mediates cellular zinc uptake to trigger cells to undergo epithelial-to-mesenchymal transition (EMT) (PubMed: 23186163). SLC39A10-SLC39A6 heterodimers play also an essential role in initiating mitosis by importing zinc into cells to initiate a pathway resulting in the onset of mitosis (PubMed: 32797246). Plays an important for both mature B-cell

maintenance and humoral immune responses (By similarity). When associated with SLC39A10, the heterodimer controls NCAM1 phosphorylation and integration into focal adhesion complexes during EMT (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Expressed at the apical membranes of proximal tubules in the kidney.

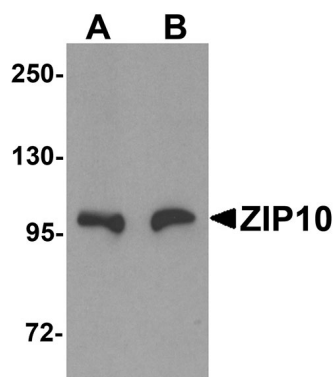
Background

ZIP10 Antibody: ZIP10, also known as Slc39A10, is a widely expressed zinc transporter with nine transmembrane domains. Zinc is an essential ion for cells and plays significant roles in the growth, development, and differentiation. ZIP10 mRNA was found to be significantly decreased in the intestines and kidneys of hypothyroid rats and increased in those of hyperthyroid rats, indicating that ZIP10 is positively regulated by thyroid hormones. ZIP10 mRNA was also found to be upregulated in invasive and metastatic breast cancer and cell lines, suggesting that ZIP10 could serve as a possible marker for the metastatic phenotype and possibly a target for novel treatment strategies.

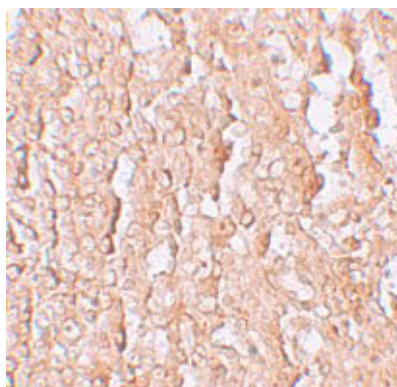
References

- Kaler P and Prasad R. Molecular cloning and functional characterization of novel transporter rZip10 (Slc39a10) involved in zinc uptake across renal brush-border membrane. *Am. J. Renal Physiol.* 2007; 292:F217-29.
- Taylor KM and Nicolson RI. The LZT proteins; the LIV-1 subfamily of zinc transporters. *Biochim. Biophys. Acta.* 2003; 1611:16-30.
- Pawan K, Neeraj S, Sandeep K, et al. Upregulation of Slc39a10 gene expression in response to thyroid hormones in intestine and kidney. *Biochim. Biophys. Acta.* 2007; 1769:117-23.
- Kagara N, Tanaka N, Noguchi S, et al. Zinc and its transporter ZIP10 are involved in invasive behavior of breast cancer cells. *Cancer Sci.* 2007; 98:692-7.

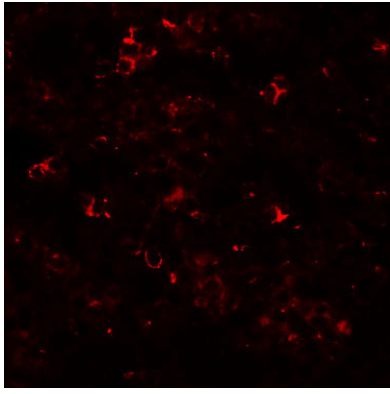
Images



Western blot analysis of ZIP10 in human spleen tissue lysate with ZIP10 antibody at (A) 1 and (B) 2 $\mu\text{g/mL}$.



Immunohistochemistry of ZIP10 in human spleen tissue with ZIP10 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of ZIP10 in human spleen tissue with ZIP10 antibody at 20 µg/mL.

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