

ZIP2 Antibody
Catalog # ASC11244**Specification**

ZIP2 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q9NP94
Other Accession	NP_055394 , 156415986
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	ZIP2 antibody can be used for detection of ZIP2 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

ZIP2 Antibody - Additional Information

Gene ID	29986
Target/Specificity	
SLC39A2;	

Reconstitution & Storage

ZIP2 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

ZIP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ZIP2 Antibody - Protein Information

Name SLC39A2 ([HGNC:17127](#))

Synonyms ZIP2

Function

Transporter for the divalent cation Zn(2+) (PubMed:10681536, PubMed:29791142, PubMed:30914478). Mediates the influx of Zn(2+) into cells from extracellular space. The Zn(2+) uniporter activity is independent of H(+)-driving force, but is modulated by extracellular pH and membrane potential. Transports also other divalent cations Zn(2+), Cd2(+), Cu2(+), Co2(+) in the order of decreasing affinity, respectively (PubMed:29791142)

target="_blank">29791142, PubMed:30914478). In the skin, aids in the differentiation of keratinocytes in the epidermis (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

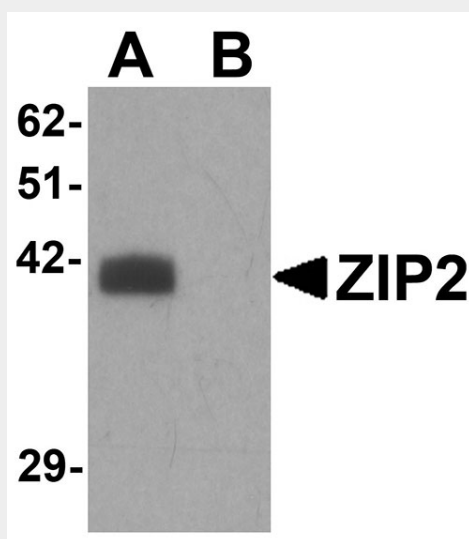
Tissue Location

Expressed only in prostate and uterine epithelial cells.

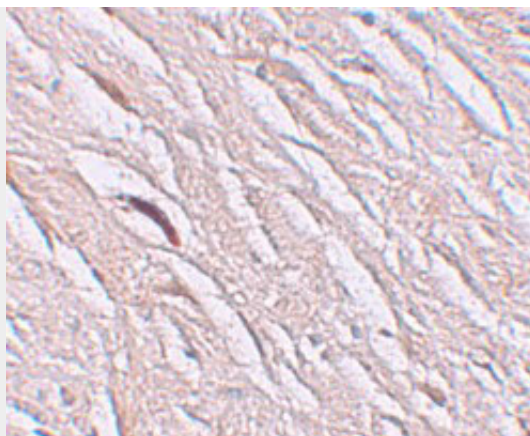
ZIP2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

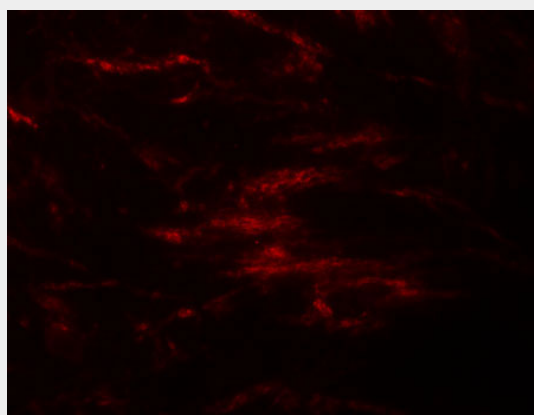
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ZIP2 Antibody - Images

Western blot analysis of ZIP2 in rat brain tissue lysate with ZIP2 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of ZIP2 in human brain tissue with ZIP2 antibody at 2.5 µg/mL.



Immunofluorescence of ZIP2 in human brain tissue with ZIP2 antibody at 20 µg/mL.

ZIP2 Antibody - Background

ZIP2 Antibody: The zinc transporter ZIP2, also known as SLC39A2, is a member of a family of divalent ion transporters. Zinc is an essential ion for cells and plays significant roles in the growth, development, and differentiation. Similar to knock-outs of ZIP1 and ZIP3, ZIP2-null mice have no phenotypic differences compared to wild-type mice. Only when ZIP1, ZIP2, and ZIP3 genes are all eliminated and these mutant mice are fed a zinc-deficient diet do abnormalities such as reduced embryonic-membrane bound alkaline phosphatase activity and abnormal development occur, indicating that the ZIP1-3 proteins play an important, noncompensatory role when zinc is deficient. More recent studies have shown that ZIP2 and ZIP3 are down regulated in human prostate adenocarcinomatous glands, and may be important in the retention of zinc in the cellular compartment.

ZIP2 Antibody - References

Gaither LA and Eide DJ. Functional expression of the human hZIP2 zinc transporter. *J. Biol. Chem.*2000; 275:5560-4.
Eide DJ. The SLC39 family of metal ion transporters. *Pflugers Arch.*2004; 447:796-800.
Taylor KM and Nicolson RI. The LZT proteins; the LIV-1 subfamily of zinc transporters. *Biochim. Biophys. Acta.*2003; 1611:16-30.
Kambe T, Geiser J, Lahner B, et al. Slc39a1 to 3 (subfamily II) Zip genes in mice have unique cell-specific functions during adaptation to zinc deficiency. *Am. J. Physiol. Regul. Integr. Comp. Physiol.*2008; 294:R1474-81.