

# ZIP13 Antibody

Catalog # ASC11253

#### Specification

### ZIP13 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC, IF <u>O96H72</u> NP\_001121697, 190014617 Human Rabbit Polyclonal IgG ZIP13 antibody can be used for detection of ZIP13 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.

## ZIP13 Antibody - Additional Information

Gene ID Target/Specificity

91252

SIc39a13; At least two isoforms of ZIP13 are known to exist; this antibody will detect both isoforms. ZIP13 antibody is predicted to not cross-react with other ZIP family members.

#### **Reconstitution & Storage**

ZIP13 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

ZIP13 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **ZIP13 Antibody - Protein Information**

Name SLC39A13 (HGNC:20859)

Synonyms ZIP13

Function

Functions as a zinc transporter transporting Zn(2+) from the Golgi apparatus to the cytosol and thus influences the zinc level at least in areas of the cytosol (PubMed: <a

href="http://www.uniprot.org/citations/21917916" target="\_blank">21917916</a>, PubMed:<a href="http://www.uniprot.org/citations/23213233" target="\_blank">23213233</a>). May regulate beige adipocyte differentiation (By similarity).

**Cellular Location** 



Golgi apparatus membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane. Endoplasmic reticulum membrane

#### ZIP13 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### ZIP13 Antibody - Images



Western blot analysis of ZIP13 in K562 cell lysate with ZIP13 antibody at 1 µg/mL.



Immunohistochemistry of ZIP13 in human spleen tissue with ZIP13 antibody at 2.5 µg/mL.





Immunofluorescence of ZIP13 in human spleen tissue with ZIP13 antibody at 20  $\mu$ g/mL.

## ZIP13 Antibody - Background

ZIP13 Antibody: The zinc transporter ZIP13, also known as SLC39A13, 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. The zinc transporter family is divided into four subfamilies (I, II, LIV-1 and gufA). ZIP13 is a multipass membrane protein that belongs to the ZIP transporter subfamily LIV-1. Mutations in ZIP13 have recently been shown to cause a spondylocheiro dysplastic form of Ehlers-Danlos syndrome (SCD-EDS), a generalized skeletal dysplasia involving mainly the spine with clinical abnormalities of the hands in addition to EDS-like features. Other experiments have shown that ZIP13 is required for proper connective tissue development and is involved in BMP/TGF- signaling pathways.

#### ZIP13 Antibody - References

Dufner-Beattie J, Langmade SJ, Wang F, et al. Structure, function, and regulation of a subfamily of mouse zinc transporter genes. J. Biol. Chem.2003; 278:50142-50.

Eide DJ. The SLC39 family of metal ion transporters. Pflugers Arch.2004; 447:796-800. Taylor KM and Nicohlson RI. The LZT proteins; the LIV-1 subfamily of zinc transporters. Biochim. Biophys. Acta.2003; 1611:16-30.

Giunta C, Elcioglu NH, Albrecht B, et al. Spondylocheiro dysplastic form of Ehlers-Danlos syndrome an autosomal recessive entity caused by mutations in the zinc transporter SLC39A13. Am. J. Hum. Genet.2008; 82:1290-305.