# SANTA CRUZ BIOTECHNOLOGY, INC.

# ZIP10 (1F6): sc-517167



### BACKGROUND

ZIP10 (zinc transporter ZIP10, solute carrier family 39 member 10) is a multipass (7 transmembrane regions) membrane protein that belongs to the ZIP transporter (TC 2.A.5) family. Zinc transporters all have transmembrane domains, and are encoded by two SLC (solute-linked carrier) gene families: ZnT (SLC30) and ZIP (SLC39). There are at least 9 ZnT and 15 ZIP transporters in human cells. ZIP transporters are believed to increase intracellular zinc by promoting zinc uptake. This may be facilitated by vesicles within the cell that release release into the cytoplasm. ZIP and ZnT transporter families exhibit tissue-specific expression and respond differently to zinc deficiency and excess. High expression levels of ZIP10 can be correlated with invasiveness of several metastatic breast cancers.

#### REFERENCES

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- 3. Pawan, K., et al. 2007. Upregulation of Slc39a10 gene expression in response to thyroid hormones in intestine and kidney. Biochim. Biophys. Acta 1769: 117-123.
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- Lichten, L.A. and Cousins, R.J. 2009. Mammalian zinc transporters: nutritional and physiologic regulation. Annu. Rev. Nutr. 29: 153-176.
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### CHROMOSOMAL LOCATION

Genetic locus: SLC39A10 (human) mapping to 2q32.3.

#### SOURCE

ZIP10 (1F6) is a mouse monoclonal antibody raised against amino acids 514-621 representing partial length ZIP10 of human origin.

# PRODUCT

Each vial contains 100  $\mu g~lgG_1$  kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

ZIP10 (1F6) is recommended for detection of ZIP10 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

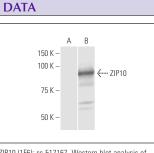
Suitable for use as control antibody for ZIP10 siRNA (h): sc-94302, ZIP10 shRNA Plasmid (h): sc-94302-SH and ZIP10 shRNA (h) Lentiviral Particles: sc-94302-V.

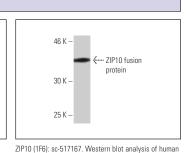
Molecular Weight of ZIP10: 40 kDa.

Positive Controls: ZIP10 transfected 293T whole cell lysate.

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).





recombinant ZIP10 fusion protein

ZIP10 (1F6): sc-517167. Western blot analysis of ZIP10 expression in non-transfected (A) and ZIP10 transfected (B) 293T whole cell lysates.

STORAGE Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

shipment. Non-hazardous. No MSDS required.

#### PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.