SANTA CRUZ BIOTECHNOLOGY, INC.

ZIP9 (P-18) : sc-83493

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ZIP9 (zinc transporter ZIP9, solute carrier family 39 member 9) is a multi-pass (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. ZIP9 has been shown to localize to the *trans*-Golgi network regardless of zinc presence. ZIP9 is believed to function as a zinc homeostasis regulator acting in the secretory pathway. This process seems to not significantly alter cytosolic zinc homeostasis.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: SLC39A9 (human) mapping to 14q24.1; Slc39a9 (mouse) mapping to 12 D1.

SOURCE

ZIP9 (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZIP9 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83493 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZIP9 (P-18) is recommended for detection of ZIP9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ZIP family members.

ZIP9 (P-18) is also recommended for detection of ZIP9 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZIP9 siRNA (h): sc-76964, ZIP9 siRNA (m): sc-76965, ZIP9 shRNA Plasmid (h): sc-76964-SH, ZIP9 shRNA Plasmid (m): sc-76965-SH, ZIP9 shRNA (h) Lentiviral Particles: sc-76964-V and ZIP9 shRNA (m) Lentiviral Particles: sc-76965-V.

Molecular Weight of ZIP9: 32 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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