SANTA CRUZ BIOTECHNOLOGY, INC.

ZnT-9 (H-300): sc-98820

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Zinc, an essential element required for cell proliferation and differentiation, plays a role in a diverse array of cellular functions, including acting as a cofactor for numerous enzymes and transcription factors and as a neuroregulator. The zinc transporter (ZnT) or solute carrier 30 (SLC30) family regulates the supply of zinc within cells, and its members are characterized by containing six membrane-spanning domains, a large histidine-rich intracellular loop and a C-terminal tail. ZnT proteins also belong to the cation diffusion facilitator (CDF) transporter family of metal ion transporters. ZnT-9, also known as HUEL (human embryonic lung protein), GAC63 (GRIP1-associated coactivator 1) or SLC30 member 9, displays ubiquitous expression in fetal and adult tissues as well as cancer cell lines. ZnT-9 localizes to the cytoplasm and is translocated to the nucleus during S phase. ZnT-9 has the lowest homology with the other zinc transporters and may function as a DNA-binding protein.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC30A9 (human) mapping to 4p13; Slc30a9 (mouse) mapping to 5 C3.1.

SOURCE

ZnT-9 (H-300) is a rabbit polyclonal antibody raised against amino acids 260-553 mapping near the C-terminus of ZnT-9 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.

APPLICATIONS

ZnT-9 (H-300) is recommended for detection of ZnT-9 of mouse, rat and 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)], 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 ZnT family members.

ZnT-9 (H-300) is also recommended for detection of ZnT-9 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ZnT-9 siRNA (h): sc-77015, ZnT-9 siRNA (m): sc-77016, ZnT-9 shRNA Plasmid (h): sc-77015-SH, ZnT-9 shRNA Plasmid (m): sc-77016-SH, ZnT-9 shRNA (h) Lentiviral Particles: sc-77015-V and ZnT-9 shRNA (m) Lentiviral Particles: sc-77016-V.

Molecular Weight of ZnT-9: 64 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

RESEARCH USE

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

PROTOCOLS

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