SANTA CRUZ BIOTECHNOLOGY, INC.

ZnT-3 (V-14): sc-27509

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 co-factor for numerous enzymes and transcription factors and as a neuroregulator. The zinc transporter (ZnT) 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-3 mediates the uptake of zinc into vesicles in brain and testis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC30A3 (human) mapping to 2p23.3; Slc30a3 (mouse) mapping to 5 B1.

SOURCE

ZnT-3 (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of ZnT-3 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-27509 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZnT-3 (V-14) is recommended for detection of ZnT-3 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ZnT-3 (V-14) is also recommended for detection of ZnT-3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZnT-3 siRNA (h): sc-45964, ZnT-3 siRNA (m): sc-45993, ZnT-3 siRNA (r): sc-45960, ZnT-3 shRNA Plasmid (h): sc-45964-SH, ZnT-3 shRNA Plasmid (m): sc-45993-SH, ZnT-3 shRNA Plasmid (r): sc-45960-SH, ZnT-3 shRNA (h) Lentiviral Particles: sc-45964-V, ZnT-3 shRNA (m) Lentiviral Particles: sc-45993-V and ZnT-3 shRNA (r) Lentiviral Particles: sc-45960-V.

Molecular Weight of ZnT-3: 48 kDa.

Positive Controls: Mouse brain extract: sc-2253, rat brain extract: sc-2392 or mouse testis extract: sc-2405.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

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.