

# ZnT-10 (Q-14): sc-160942

## BACKGROUND

Zinc, an essential element required for cell proliferation and differentiation, plays a role in a diverse array of cellular functions (such as neuroregulation) and acts as a cofactor for numerous enzymes and transcription factors. The zinc transporter (ZnT) family regulates the supply of zinc within cells, and its members commonly contain six membrane-spanning domains, a large histidine-rich intracellular loop and a C-terminal tail. ZnT-10 (zinc transporter 10), also known as ZNT8, ZRC1, ZNT10 or SLC30A10, is a 496 amino acid multi-pass membrane protein belonging to the cation diffusion facilitator (CDF) transporter family. Specifically expressed in fetal liver and fetal brain, ZnT-10 may be involved in the efflux of zinc from the cell. Existing as three isoforms produced by alternative splicing events, ZnT-10 enhances glucose-stimulated Insulin secretion.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SLC30A10 (human) mapping to 1q41; Slc30a10 (mouse) mapping to 1 H5.

## SOURCE

ZnT-10 (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of ZnT-10 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160942 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ZnT-10 (Q-14) is recommended for detection of ZnT-10 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 ZnT family members.

ZnT-10 (Q-14) is also recommended for detection of ZnT-10 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZnT-10 siRNA (h): sc-88233, ZnT-10 siRNA (m): sc-155818, ZnT-10 shRNA Plasmid (h): sc-88233-SH, ZnT-10 shRNA Plasmid (m): sc-155818-SH, ZnT-10 shRNA (h) Lentiviral Particles: sc-88233-V and ZnT-10 shRNA (m) Lentiviral Particles: sc-155818-V.

Molecular Weight of ZnT-10: 54 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.