

## ZnT-6 (E-14): sc-161275

### 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-6 (zinc transporter 6), also known as SLC30A6 (Solute carrier family 30 member 6), is a 461 amino acid gene product that localizes to the membrane of the *trans*-Golgi network. Expressed throughout the body with highest expression in brain, eye and lung, ZnT-6 functions as zinc transporter that regulates zinc homeostasis within vesicular compartments and the Golgi apparatus and may help to form Insulin crystals within pancreatic  $\beta$  cells. ZnT-6 is expressed as three isoforms due to alternative splicing events and its expression is upregulated in response to zinc depletion.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: SLC30A6 (human) mapping to 2p22.3; Slc30a6 (mouse) mapping to 17 E2.

### SOURCE

ZnT-6 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of ZnT-6 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-161275 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

ZnT-6 (E-14) is recommended for detection of ZnT-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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.

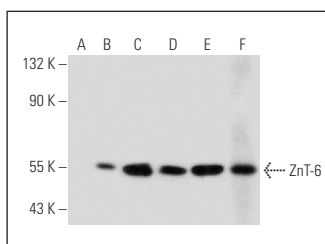
ZnT-6 (E-14) is also recommended for detection of ZnT-6 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ZnT-6 siRNA (h): sc-94723, ZnT-6 siRNA (m): sc-155821, ZnT-6 shRNA Plasmid (h): sc-94723-SH, ZnT-6 shRNA Plasmid (m): sc-155821-SH, ZnT-6 shRNA (h) Lentiviral Particles: sc-94723-V and ZnT-6 shRNA (m) Lentiviral Particles: sc-155821-V.

Molecular Weight of ZnT-6: 51 kDa.

Positive Controls: F9 cell lysate: sc-2245, LADMAC whole cell lysate: sc-364189 or ZnT-6 (m): 293T Lysate: sc-124822.

### DATA



ZnT-6 (E-14): sc-161275. Western blot analysis of ZnT-6 expression in non-transfected 293T: sc-117752 (A), mouse ZnT-6 transfected 293T: sc-124822 (B), F9 (C), LADMAC (D) and HeLa (E) whole cell lysates and mouse thymus tissue extract (F).

### 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.