

ZnT-9 (E-24): sc-134214



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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- González-Guerrero, M., et al. 2005. Characterization of a glomus intraradices gene encoding a putative Zn transporter of the cation diffusion facilitator family. *Fungal Genet. Biol.* 42: 130-140.
- Chimienti, F., et al. 2005. ZnT-8, a pancreatic β -cell-specific zinc transporter. *Biometals* 18: 313-317.
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- Smidt, K., et al. 2007. Zinc-transporter genes in human visceral and subcutaneous adipocytes: lean versus obese. *Mol. Cell. Endocrinol.* 264: 68-73.
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CHROMOSOMAL LOCATION

Genetic locus: SLC30A9 (human) mapping to 4p13.

SOURCE

ZnT-9 (E-24) is an affinity purified rabbit polyclonal antibody raised against synthetic ZnT-9 peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

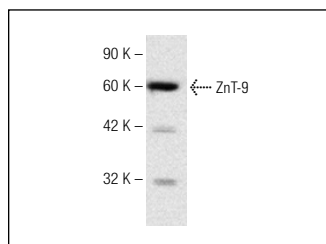
ZnT-9 (E-24) is recommended for detection of ZnT-9 of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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).

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

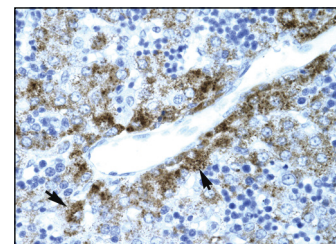
Molecular Weight of ZnT-9: 64 kDa.

Positive Controls: human liver tissue or Hep G2 cell lysate: sc-2227.

DATA



ZnT-9 (E-24): sc-134214. Western blot analysis of ZnT-9 expression in Hep G2 whole cell lysate.



ZnT-9 (E-24): sc-134214. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human liver tissue showing cytoplasmic localization.

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.



Try **ZnT-9 (C-3): sc-271956**, our highly recommended monoclonal alternative to ZnT-9 (E-24).