



**SZABO
SCANDIC**

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic



ZnT-6 (m): 293T Lysate: sc-124822

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 β cells. ZnT-6 is expressed as three isoforms due to alternative splicing events and its expression is upregulated in response to zinc depletion.

REFERENCES

- Huang, L., Kirschke, C.P. and Gitschier, J. 2002. Functional characterization of a novel mammalian zinc transporter, ZnT-6. *J. Biol. Chem.* 277: 26389-26395.
- Lovell, M.A., Smith, J.L. and Markesberry, W.R. 2006. Elevated zinc transporter-6 in mild cognitive impairment, Alzheimer disease, and pick disease. *J. Neuropathol. Exp. Neurol.* 65: 489-498.
- Albrecht, A.L., Somji, S., Sens, M.A., Sens, D.A. and Garrett, S.H. 2008. Zinc transporter mRNA expression in the RWPE-1 human prostate epithelial cell line. *Biometals* 21: 405-416.
- Fukunaka, A., Suzuki, T., Kurokawa, Y., Yamazaki, T., Fujiwara, N., Ishihara, K., Migaki, H., Okumura, K., Masuda, S., Yamaguchi-Iwai, Y., Nagao, M. and Kambe, T. 2009. Demonstration and characterization of the heterodimerization of ZnT5 and ZnT6 in the early secretory pathway. *J. Biol. Chem.* 284: 30798-30806.
- Lyubartseva, G., Smith, J.L., Markesberry, W.R. and Lovell, M.A. 2009. Alterations of zinc transporter proteins ZnT-1, ZnT-4 and ZnT-6 in preclinical Alzheimer's disease brain. *Brain Pathol.* 20: 343-350.
- Kehl-Fie, T.E. and Skaar, E.P. 2009. Nutritional immunity beyond iron: a role for manganese and zinc. *Curr. Opin. Chem. Biol.* 14: 218-224.
- Wang, X. and Zhou, B. 2010. Dietary zinc absorption: a play of zips and ZnTs in the gut. *IUBMB Life* 62: 176-182.
- Fukunaka, A. and Kambe, T. 2010. Mechanism of zinc transport by zinc transporters, ZnT and ZIP. *Seikagaku* 82: 30-34.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Slc30a6 (mouse) mapping to 17 E2.

PRODUCT

ZnT-6 (m): 293T Lysate represents a lysate of mouse ZnT-6 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

ZnT-6 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ZnT-6 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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