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## Produktinformation



Forschungsprodukte & Biochemikalien



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Diagnostik & molekulare Diagnostik



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### Zuschläge

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- Expressversand

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# ZIP7 (h2): 293T Lysate: sc-173950

## BACKGROUND

Zinc is an essential cofactor that is involved in cell growth and development, as well as in protein, nucleic acid and lipid metabolism. The transport of zinc across the cell membrane is crucial for correct enzyme and overall cell function. ZIP7, also known as SLC39A7 (solute carrier family 39 (zinc transporter), member 7), KE4, HKE4, RING5 or H2-KE4, is a 469 amino acid multi-pass membrane protein that belongs to the ZIP transporter family. Expressed at high levels in kidney, placenta, pancreas and lung, ZIP7 functions as a zinc transporter that facilitates the movement of zinc, both from the extracellular environment and from intracellular storage compartments, to the cytosol. The gene encoding ZIP7 maps to human chromosome 6p21.32, which contains 170 million base pairs and comprises nearly 6% of the human genome.

## REFERENCES

1. Aziz, N., et al. 1993. Downregulation of KE6, a novel gene encoded within the major histocompatibility complex, in murine polycystic kidney disease. *Mol. Cell. Biol.* 13: 1847-1853.
2. Aziz, N., et al. 1994. Coordinate regulation of 11  $\beta$ -HSD and KE6 genes in Cpk mouse: implications for steroid metabolic defect in PKD. *Am. J. Physiol.* 267: F791-F797.
3. Ando, A., et al. 1996. cDNA cloning of the human homologues of the mouse KE4 and KE6 genes at the centromeric end of the human MHC region. *Genomics* 35: 600-602.
4. Kikuti, Y.Y., et al. 1997. Physical mapping 220 kb centromeric of the human MHC and DNA sequence analysis of the 43 kb segment including the RING1, HKE6, and HKE4 genes. *Genomics* 42: 422-435.
5. Taylor, K.M., et al. 2004. Structure-function analysis of HKE4, a member of the new LIV-1 subfamily of zinc transporters. *Biochem. J.* 377: 131-139.
6. Huang, L., et al. 2005. The ZIP7 gene (SLC39A7) encodes a zinc transporter involved in zinc homeostasis of the Golgi apparatus. *J. Biol. Chem.* 280: 15456-15463.
7. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 601416. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
8. Taylor, K.M., et al. 2008. ZIP7-mediated intracellular zinc transport contributes to aberrant growth factor signaling in antihormone-resistant breast cancer cells. *Endocrinology* 149: 4912-4920.

## CHROMOSOMAL LOCATION

Genetic locus: SLC39A7 (human) mapping to 6p21.32.

## PRODUCT

ZIP7 (h2): 293T Lysate represents a lysate of human ZIP7 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## 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.

## APPLICATIONS

ZIP7 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive ZIP7 antibodies. Recommended use: 10-20  $\mu$ 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.

## PROTOCOLS

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