



ZNHIT2 (m): 293T Lysate: sc-124814

BACKGROUND

ZNHIT2 (zinc finger, HIT-type containing 2), also known as FON, is a 403 amino acid protein that is highly expressed in the seminiferous tubules of testis, with low expression in other tissues. Containing one HIT-type zinc finger, ZNHIT2 is encoded by a gene that maps to human chromosome 11, which comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded *Atm* gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. *Atm* mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and thalassemia are caused by *HBB* gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the *WT1* gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

REFERENCES

1. Lemmens, I., Merregaert, J., Van de Ven, W.J., Kas, K., Zhang, C.X., Giraud, S., Wautot, V., Buisson, N., De Witte, K., Salandre, J., Lenoir, G., Calender, A., Parente, F., Quincey, D., Courseaux, A., Carle, G.F., Gaudray, P., De Wit, M.J., Lips, C.J., et al. 1997. Construction of a 1.2-Mb sequence-ready contig of chromosome 11q13 encompassing the multiple endocrine neoplasia type 1 (MEN1) gene. *The European consortium on MEN1. Genomics* 44: 94-100.
2. Lemmens, I.H., Kas, K., Merregaert, J. and Van de Ven, W.J. 1998. Identification and molecular characterization of TM7SF2 in the FAUNA gene cluster on human chromosome 11q13. *Genomics* 49: 437-442.
3. Lemmens, I.H., Farnebo, F., Piehl, F., Merregaert, J., Van de Ven, W.J., Larsson, C. and Kas, K. 2000. Molecular characterization of human and murine C11orf5, a new member of the FAUNA gene cluster. *Mamm. Genome* 11: 78-80.
4. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 604575. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Jira, P.E., Waterham, H.R., Wanders, R.J., Smeitink, J.A., Sengers, R.C. and Wevers, R.A. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. *Ann. Hum. Genet.* 67: 269-280.
6. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. *J. Inherit. Metab. Dis.* 30: 654-663.
7. Bhuiyan, Z.A., Momenah, T.S., Amin, A.S., Al-Khadra, A.S., Alders, M., Wilde, A.A. and Mannens, M.M. 2008. An intronic mutation leading to incomplete skipping of exon-2 in *KCNQ1* rescues hearing in Jervell and Lange-Nielsen syndrome. *Prog. Biophys. Mol. Biol.* 98: 319-327.

CHROMOSOMAL LOCATION

Genetic locus: *Znhit2-ps* (mouse) mapping to 19 A.

RESEARCH USE

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

PRODUCT

ZNHIT2 (m): 293T Lysate represents a lysate of mouse ZNHIT2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

ZNHIT2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ZNHIT2 antibodies. Recommended use: 10-20 µl per lane.

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

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.