

ZNF276 (h): 293T Lysate: sc-111822

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. ZNF276 is a 614 amino acid protein containing five C₂H₂-type zinc fingers and one zinc finger associated (ZAD) domain. Due to a loss of heterozygosity at the chromosomal location of the gene encoding ZNF276 in sporadic breast cancers, the ZNF276 gene has been targeted as a possible breast cancer tumor suppressor. The FANCA gene, which encodes a DNA repair protein, is situated at the same chromosomal location as the ZNF276 gene, suggesting a possible involvement of ZNF276 in the progression of Fanconi anemia, an autosomal recessive disorder which is caused by mutations in the gene encoding FANCA. There are two isoforms of ZNF276 that exist as a result of an alternative splicing event.

REFERENCES

1. Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. *FEBS Lett.* 234: 245-250.
2. Brenner, A.J. and Aldaz, C.M. 1997. The genetics of sporadic breast cancer. *Prog. Clin. Biol. Res.* 396: 63-82.
3. Nakamura, A., Matsuura, S., Tauchi, H., Hanada, R., Ohashi, H., Hasegawa, T., Honda, K., Masuno, M., Imaizumi, K., Sugita, K., Ide, T. and Komatsu, K. 1999. Four novel mutations of the Fanconi anemia group A gene (FAA) in Japanese patients. *J. Hum. Genet.* 44: 48-51.
4. Wong, J.C., Alon, N., Norga, K., Krut, F.A., Youssoufian, H. and Buchwald, M. 2000. Cloning and analysis of the mouse Fanconi anemia group A cDNA and an overlapping penta zinc finger cDNA. *Genomics* 67: 273-283.
5. Chung, H.R., Schäfer, U., Jäckle, H. and Böhm, S. 2002. Genomic expansion and clustering of ZAD-containing C₂H₂ zinc-finger genes in *Drosophila*. *EMBO Rep.* 3: 1158-1162.
6. Wong, J.C., Gokgoz, N., Alon, N., Andrulis, I.L. and Buchwald, M. 2003. Cloning and mutation analysis of ZFP276 as a candidate tumor suppressor in breast cancer. *J. Hum. Genet.* 48: 668-671.
7. Jauch, R., Bourenkov, G.P., Chung, H.R., Urlaub, H., Reidt, U., Jäckle, H. and Wahl, M.C. 2003. The zinc finger-associated domain of the *Drosophila* transcription factor grauzone is a novel zinc-coordinating protein-protein interaction module. *Structure* 11: 1393-1402.
8. Imami, K., Sugiyama, N., Kyono, Y., Tomita, M. and Ishihama, Y. 2008. Automated phosphoproteome analysis for cultured cancer cells by two-dimensional nanoLC-MS using a calcined titania/C18 biphasic column. *Anal. Sci.* 24: 161-166.
9. Liu, J. and Stormo, G.D. 2008. Context-dependent DNA recognition code for C₂H₂ zinc-finger transcription factors. *Bioinformatics* 24: 1850-1857.

CHROMOSOMAL LOCATION

Genetic locus: ZNF276 (human) mapping to 16q24.3.

RESEARCH USE

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

PRODUCT

ZNF276 (h): 293T Lysate represents a lysate of human ZNF276 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

ZNF276 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ZNF276 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.