

JAZF1 (h): 293T Lysate: sc-370188

BACKGROUND

JAZF1 (juxtaposed with another zinc finger protein 1), also known as TIP27 (TAK1-interacting protein 27) or ZNF802 (zinc finger protein 802), is a 243 amino acid protein that localizes to the nucleus and contains 3 C₂H₂-type zinc fingers. Existing as multiple alternatively spliced isoforms, JAZF1 interacts with the nuclear orphan receptor TR4 and is thought to function as a transcriptional repressor, effectively down-regulation the expression of TR4. Chromosomal aberrations in the gene encoding JAZF1 are associated with the pathogenesis of endometrial stromal tumors, suggesting a role for JAZF1 in carcinogenesis. The JAZF1 gene maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

1. Koontz, J.I., et al. 2001. Frequent fusion of the JAZF1 and JJAZ1 genes in endometrial stromal tumors. *Proc. Natl. Acad. Sci. USA* 98: 6348-6353.
2. Huang, H.Y., et al. 2004. Molecular detection of JAZF1-JJAZ1 gene fusion in endometrial stromal neoplasms with classic and variant histology: evidence for genetic heterogeneity. *Am. J. Surg. Pathol.* 28: 224-232.
3. Nakajima, T., et al. 2004. TIP27: a novel repressor of the nuclear orphan receptor TAK1/TR4. *Nucleic Acids Res.* 32: 4194-4204.
4. Micci, F., et al. 2006. Consistent rearrangement of chromosomal band 6p21 with generation of fusion genes JAZF1/PHF1 and EPC1/PHF1 in endometrial stromal sarcoma. *Cancer Res.* 66: 107-112.
5. Nucci, M.R., et al. 2007. Molecular analysis of the JAZF1-JJAZ1 gene fusion by RT-PCR and fluorescence in situ hybridization in endometrial stromal neoplasms. *Am. J. Surg. Pathol.* 31: 65-70.
6. Li, H., et al. 2007. Effects of rearrangement and allelic exclusion of JJAZ1/SUZ12 on cell proliferation and survival. *Proc. Natl. Acad. Sci. USA* 104: 20001-20006.
7. Panagopoulos, I., et al. 2008. An endometrial stromal sarcoma cell line with the JAZF1/PHF1 chimera. *Cancer Genet. Cytogenet.* 185: 74-77.
8. Johansson, A., et al. 2009. Common variants in the JAZF1 gene associated with height identified by linkage and genome-wide association analysis. *Hum. Mol. Genet.* 18: 373-380.

CHROMOSOMAL LOCATION

Genetic locus: JAZF1 (human) mapping to 7p15.2.

PRODUCT

JAZF1 (h): 293T Lysate represents a lysate of human JAZF1 transfected 293T cells and is provided as 100 µg protein in 200 µl 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

JAZF1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive JAZF1 antibodies. Recommended use: 10-20 µl per lane.

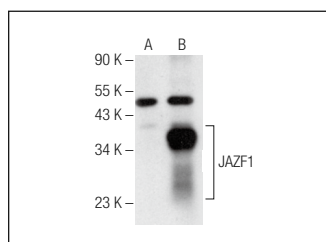
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

JAZF1 (C-11): sc-376503 is recommended as a positive control antibody for Western Blot analysis of enhanced human JAZF1 expression in JAZF1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



JAZF1 (C-11): sc-376503. Western blot analysis of JAZF1 expression in non-transfected: sc-117752 (A) and human JAZF1 transfected: sc-370188 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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