

JAZF1 (F-16): sc-82206

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 three 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 downregulating 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; Jazf1 (mouse) mapping to 6 B3.

SOURCE

JAZF1 (F-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JAZF1 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82206 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82206 X, 200 µg/0.1 ml.

APPLICATIONS

JAZF1 (F-16) is recommended for detection of JAZF1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JAZF1 (F-16) is also recommended for detection of JAZF1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for JAZF1 siRNA (h): sc-75355, JAZF1 siRNA (m): sc-75356, JAZF1 shRNA Plasmid (h): sc-75355-SH, JAZF1 shRNA Plasmid (m): sc-75356-SH, JAZF1 shRNA (h) Lentiviral Particles: sc-75355-V and JAZF1 shRNA (m) Lentiviral Particles: sc-75356-V.

JAZF1 (F-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of JAZF1: 27 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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