SANTA CRUZ BIOTECHNOLOGY, INC.

JAZF1 (C-11): sc-376503

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 C_2H_2-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.

CHROMOSOMAL LOCATION

Genetic locus: JAZF1 (human) mapping to 7p15.2; Jazf1 (mouse) mapping to 6 B3.

SOURCE

JAZF1 (C-11) is a mouse monoclonal antibody raised against amino acids 1-243 representing full length JAZF1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376503 X, 200 µg/0.1 ml.

JAZF1 (C-11) is available conjugated to agarose (sc-376503 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376503 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376503 PE), fluorescein (sc-376503 FITC), Alexa Fluor® 488 (sc-376503 AF488), Alexa Fluor® 546 (sc-376503 AF546), Alexa Fluor® 594 (sc-376503 AF594) or Alexa Fluor® 647 (sc-376503 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376503 AF680) or Alexa Fluor® 790 (sc-376503 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

JAZF1 (C-11) is recommended for detection of JAZF1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 (C-11) is also recommended for detection of JAZF1 in additional species, including bovine.

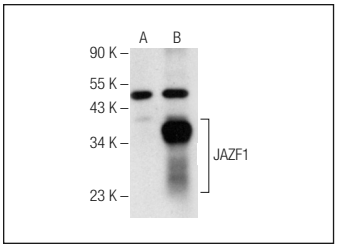
Suitable for use as control antibody for JAZF1 siRNA (h): sc-75355, JAZF1 siRNA (m): sc-75356, JAZF1 shRNA Plasmid (h): sc-75355-SH, JAZF1 shRNA Plasmid (m): sc-75356-SH, JAZF1 shRNA (h) Lentiviral Particles: sc-75355-V and JAZF1 shRNA (m) Lentiviral Particles: sc-75356-V.

JAZF1 (C-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of JAZF1: 27 kDa.

Positive Controls: JAZF1 (h): 293T Lysate: sc-370188.

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.

SELECT PRODUCT CITATIONS

1. Kobiita, A., et al. 2020. The diabetes gene JAZF1 is essential for the homeostatic control of ribosome biogenesis and function in metabolic stress. Cell Rep. 32: 107846.
2. Ding, Z., et al. 2021. Novel noncoding RNA circPTK2 regulates lipolysis and adipogenesis in cachexia. Mol. Metab. 53: 101310.
3. Wang, Q., et al. 2022. microRNA-19b-3p-containing extracellular vesicles derived from macrophages promote the development of atherosclerosis by targeting JAZF1. J. Cell. Mol. Med. 26: 48-59.
4. Lee, H.Y., et al. 2022. Deletion of Jazf1 gene causes early growth retardation and Insulin resistance in mice. Proc. Natl. Acad. Sci. USA 119: e2213628119.

RESEARCH USE

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