SANTA CRUZ BIOTECHNOLOGY, INC.

JAZF1 (C-11): sc-376503



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 μ g lgG_{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 μ g/0.1 ml.

JAZF1 (C-11) is available conjugated to agarose (sc-376503 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376503 HRP), 200 μ g/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 μ g/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 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

STORAGE

Store at 4° C, **D0 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 μ g per 100-500 μ g 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

- 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.
- Ding, Z., et al. 2021. Novel noncoding RNA circPTK2 regulates lipolysis and adipogenesis in cachexia. Mol. Metab. 53: 101310.
- 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.
- 4. Liang, Y., et al. 2023. JAZF1 safeguards human endometrial stromal cells survival and decidualization by repressing the transcription of GOS2. Commun. Biol. 6: 568.

RESEARCH USE

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