SANTA CRUZ BIOTECHNOLOGY, INC.

TGIF2 (h2): 293T Lysate: sc-172678

BACKGROUND

TGIF2 (TGFβ-induced factor homeobox 2), also called 5'-TG-3'-interacting factor 2, is a widely expressed protein with predominant expression in kidney, heart and testis, and it belongs to the TALE/TGIF homeobox family. Localizing to the nucleus, TGIF2 contains one homeobox DNA-binding domain and is believed to function as a transcriptional repressor. Similar to the closely related protein TGIF, TGIF2 recruits histone deacetylases (HDACs) to TGFβ-responsive genes, thereby mediating their transcriptional repression. Specifically, TGIF2 interacts with HDAC1 and the transcriptional modulator Smad3. Mutations in the gene encoding TGIF2 can result in holoprosencephaly, a disorder characterized by the underdevelopment of the prosencephalon. In addition, TGIF2 is overexpressed in some ovarian cancers, suggesting a possible role of TGIF2 in carcinogenesis.

REFERENCES

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3. Watanabe, T., et al. 2002. Differentially regulated genes as putative targets of amplifications at 20q in ovarian cancers. Jpn. J. Cancer Res. 93: 1114-1122.
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8. Melhuish, T.A. and Wotton, D. 2006. The Tgif2 gene contains a retained intron within the coding sequence. BMC Mol. Biol. 7: 2.
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CHROMOSOMAL LOCATION

Genetic locus: TGIF2 (human) mapping to 20q11.23.

PRODUCT

TGIF2 (h2): 293T Lysate represents a lysate of human TGIF2 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

TGIF2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive TGIF2 antibodies. Recommended use: 10-20 µl per lane.

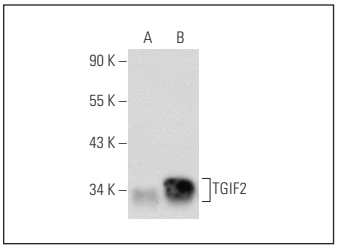
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TGIF2 (H-36): sc-81989 is recommended as a positive control antibody for Western Blot analysis of enhanced human TGIF2 expression in TGIF2 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



TGIF2 (H-36): sc-81989. Western blot analysis of TGIF2 expression in non-transfected: sc-117752 (**A**) and human TGIF2 transfected: sc-172678 (**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.