SANTA CRUZ BIOTECHNOLOGY, INC.

Suppressin (h2): 293T Lysate: sc-178001

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Suppressin, also known as DEAF-1 (deformed epidermal autoregulatory factor 1), SPN, NUDR (nuclear DEAF-1-related transcriptional regulator), or ZMYND5 (zinc finger MYND domain-containing protein 5), is a transcription factor required for embryonic development. Suppressin contains one SAND domain and one C-terminal MYND-type zinc finger. It interacts with LMO4 and CLIM-2, suggesting that it plays a role mediating cell fate and embryonic pattern formation. Suppressin is expressed in a variety of tissues and localizes to the nucleus. Several isoforms exist due to alternative splicing and, depending on the isoform, Suppressin is secreted in some cell types. Secreted Suppressin can function to inhibit cell proliferation, arresting cells in the G_0 or G_1 phase. Mutations in the gene encoding Suppressin may result in a growth advantage leading to the development and progression of neoplasia. This suggest that Supressin is a potential target for cancer therapy.

REFERENCES

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2. Michelson, R.J., et al. 1999. Nuclear DEAF-1-related (NUDR) protein contains a novel DNA binding domain and represses transcription of the heterogeneous nuclear ribonucleoprotein A2/B1 promoter. J. Biol. Chem. 274: 30510-30519.
3. Bottomley, M.J., et al. 2001. The SAND domain structure defines a novel DNA-binding fold in transcriptional regulation. Nat. Struct. Biol. 8: 626-633.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602635. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Lemonde, S., et al. 2003. Impaired repression at a 5-hydroxytryptamine 1A receptor gene polymorphism associated with major depression and suicide. J. Neurosci. 23: 8788-8799.
6. Jensik, P.J., et al. 2004. Identification of a nuclear export signal and protein interaction domains in deformed epidermal autoregulatory factor-1 (DEAF-1). J. Biol. Chem. 279: 32692-32699.
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CHROMOSOMAL LOCATION

Genetic locus: DEAF1 (human) mapping to 11p15.5.

PRODUCT

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

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

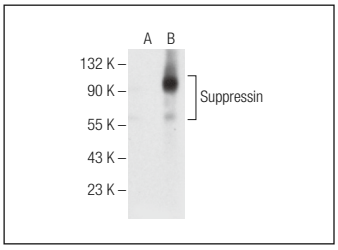
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Suppressin (A-7): sc-376477 is recommended as a positive control antibody for Western Blot analysis of enhanced human Suppressin expression in Suppressin 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



Suppressin (A-7): sc-376477. Western blot analysis of Suppressin expression in non-transfected: sc-117752 (**A**) and human Suppressin transfected: sc-178001 (**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.