

Suppressin (349C4a): sc-81389

BACKGROUND

Suppressin, also known as DEAF1 (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 G₀ or G₁ phase. Mutations in the gene encoding Suppressin may result in a growth advantage leading to the development and progression of neoplasia. This suggests that Suppressin is a potential target for cancer therapy.

REFERENCES

- Huggenvik, J.I., et al. 1998. Characterization of a nuclear deformed epidermal autoregulatory factor-1 (DEAF-1)-related (NUDR) transcriptional regulator protein. *Mol. Endocrinol.* 12: 1619-1639.
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- 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.
- 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/>
- Lemond, 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.
- 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.
- Choi, K.O., et al. 2005. Inhibition of the catalytic activity of hypoxia-inducible factor-1 α -prolyl-hydroxylase 2 by a MYND-type zinc finger. *Mol. Pharmacol.* 68: 1803-1809.

CHROMOSOMAL LOCATION

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

STORAGE

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

PROTOCOLS

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

SOURCE

Suppressin (349C4a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the N-terminus of Suppressin of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% BSA.

APPLICATIONS

Suppressin (349C4a) is recommended for detection of Suppressin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1–2 μ g per 100–500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Suppressin siRNA (h): sc-76613, Suppressin shRNA Plasmid (h): sc-76613-SH and Suppressin shRNA (h) Lentiviral Particles: sc-76613-V.

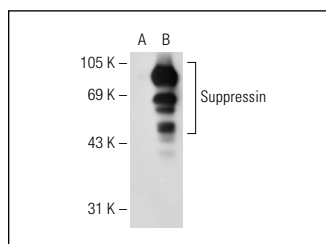
Molecular Weight of Suppressin: 59 kDa.

Positive Controls: Suppressin (h): 293T Lysate: sc-178000, Jurkat whole cell lysate: sc-2204 or Suppressin (h2): 293T Lysate: sc-178001.

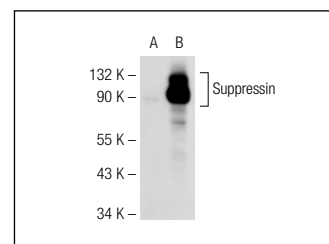
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Suppressin (349C4a): sc-81389. Western blot analysis of Suppressin expression in non-transfected: sc-117752 (A) and human Suppressin transfected: sc-178000 (B) 293T whole cell lysates.



Suppressin (349C4a): sc-81389. 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.