

Suppressin (E-5): sc-514180

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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: DEAF1 (human) mapping to 11p15.5; Deaf1 (mouse) mapping to 7 F5.

SOURCE

Suppressin (E-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 71-93 within an internal region of Suppressin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Suppressin (E-5) is available conjugated to agarose (sc-514180 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514180 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514180 PE), fluorescein (sc-514180 FITC), Alexa Fluor® 488 (sc-514180 AF488), Alexa Fluor® 546 (sc-514180 AF546), Alexa Fluor® 594 (sc-514180 AF594) or Alexa Fluor® 647 (sc-514180 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514180 AF680) or Alexa Fluor® 790 (sc-514180 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514180 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

Suppressin (E-5) is recommended for detection of Suppressin 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).

Suitable for use as control antibody for Suppressin siRNA (h): sc-76613, Suppressin siRNA (m): sc-76614, Suppressin shRNA Plasmid (h): sc-76613-SH, Suppressin shRNA Plasmid (m): sc-76614-SH, Suppressin shRNA (h) Lentiviral Particles: sc-76613-V and Suppressin shRNA (m) Lentiviral Particles: sc-76614-V.

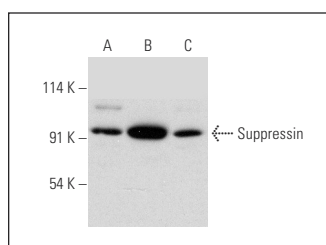
Molecular Weight of Suppressin: 90 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Suppressin (h): 293T Lysate: sc-178000 or A549 cell lysate: sc-2413.

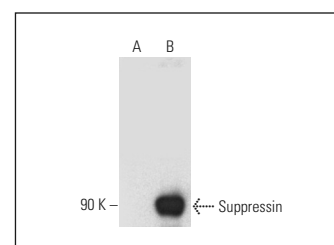
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Suppressin (E-5): sc-514180. Western blot analysis of Suppressin expression in HeLa (A), Jurkat (B) and A549 (C) whole cell lysates.



Suppressin (E-5): sc-514180. Western blot analysis of Suppressin expression in non-transfected: sc-117752 (A) and human Suppressin transfected: sc-178000 (B) 293T whole cell lysates.

STORAGE

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

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.