

NAB1 (B-5): sc-137116

BACKGROUND

Transcriptional control is in part regulated by interactions between DNA-bound transcription factors, such as Egr1/NGFI-A, and coregulatory proteins, such as NAB (for NGFI-A-binding proteins). The evolutionarily conserved NAB proteins, NAB1 and NAB2, are corepressors of Egr1/NGFI-A. Both NAB1 and NAB2 contain an amino-terminal NAB-conserved domain 1 (NCB1), which is required for binding NGFI-A, and a carboxy-terminal NCD2, which is responsible for the repressor function of NAB proteins. NAB1 requires NGFI-A to gain access to DNA, indicating that NAB1 is an active repressor that works by a direct mechanism. NAB1, which is constitutively expressed, is localized exclusively in the nucleus and may play a role in controlling processes such as cell division, differentiation and apoptosis.

REFERENCES

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3. Svaren, J., et al. 1996. NAB2, a corepressor of NGFI-A (Egr-1) and Krox20, is induced by proliferative and differentiative stimuli. *Mol. Cell. Biol.* 16: 3545-3553.
4. Swirloff, A.H., et al. 1998. NAB1, a corepressor of NGFI-A (Egr-1), contains an active transcriptional repression domain. *Mol. Cell. Biol.* 18: 512-524.
5. Sevetson, B.R., et al. 2000. A novel activation function for NAB proteins in Egr-dependent transcription of the luteinizing hormone β gene. *J. Biol. Chem.* 275: 9749-9757.
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7. Mussnug, J.H., et al. 2005. NAB1 is an RNA binding protein involved in the light-regulated differential expression of the light-harvesting antenna of *Chlamydomonas reinhardtii*. *Plant Cell* 17: 3409-3421.
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CHROMOSOMAL LOCATION

Genetic locus: NAB1 (human) mapping to 2q32.2; Nab1 (mouse) mapping to 1 C1.1.

SOURCE

NAB1 (B-5) is a mouse monoclonal antibody raised against amino acids 281-486 mapping at the C-terminus of NAB1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NAB1 (B-5) is recommended for detection of NAB1 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).

Suitable for use as control antibody for NAB1 siRNA (h): sc-38089, NAB1 siRNA (m): sc-38090, NAB1 shRNA Plasmid (h): sc-38089-SH, NAB1 shRNA Plasmid (m): sc-38090-SH, NAB1 shRNA (h) Lentiviral Particles: sc-38089-V and NAB1 shRNA (m) Lentiviral Particles: sc-38090-V.

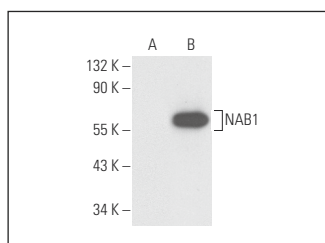
Molecular Weight of NAB1: 54 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237, HeLa whole cell lysate: sc-2200 or NAB1 (m): 293T Lysate: sc-121928.

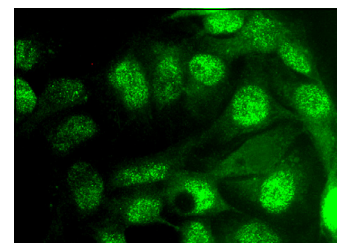
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



NAB1 (B-5): sc-137116. Western blot analysis of NAB1 expression in non-transfected: sc-117752 (A) and human NAB1 transfected: sc-121928 (B) 293T whole cell lysates.



NAB1 (B-5): sc-137116. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear and cytoplasmic localization.

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.