

# NAB2 (C-6): sc-28323

## BACKGROUND

Transcriptional control is in part regulated by interactions between DNA-bound transcription factors, such as Egr-1/NGFI-A, and co-regulatory proteins, such as NAB (for NGFI-A-binding proteins). The evolutionarily conserved NAB proteins, NAB1 and NAB2 are co-repressors of EGF-1/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 domain, which is responsible for the repressor function of NAB proteins. NAB2 is principally localized in the nucleus and may play a role in the downregulation of NGFI-A activity as well as in controlling fundamental processes such as cell division, differentiation and apoptosis. NAB2 localizes to chromosome 12q13.3, a region that is rearranged in several solid tumors, lipomas and liposarcomas.

## REFERENCES

1. Russo, M.W., et al. 1993. Transcriptional activity of the zinc finger protein NGFI-A is influenced by its interaction with a cellular factor. *Mol. Cell. Biol.* 13: 6858-6865.
2. Russo, M.W., et al. 1995. Identification of NAB1, a repressor of NGFI-A- and Krox20-mediated transcription. *Proc. Natl. Acad. Sci. USA* 92: 6873-6877.

## CHROMOSOMAL LOCATION

Genetic locus: NAB2 (human) mapping to 12q13.3; Nab2 (mouse) mapping to 10 D3.

## SOURCE

NAB2 (C-6) is a mouse monoclonal antibody raised against amino acids 346-525 of NAB2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

NAB2 (C-6) is recommended for detection of NAB2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (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 NAB2 siRNA (h): sc-36014, NAB2 siRNA (m): sc-36015, NAB2 shRNA Plasmid (h): sc-36014-SH, NAB2 shRNA Plasmid (m): sc-36015-SH, NAB2 shRNA (h) Lentiviral Particles: sc-36014-V and NAB2 shRNA (m) Lentiviral Particles: sc-36015-V.

Molecular Weight (predicted) of NAB2: 57 kDa.

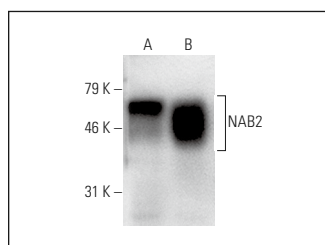
Molecular Weight (observed) of NAB2: 64 kDa.

Positive Controls: K-562 + PMA nuclear extract: sc-2131, K-562 whole cell lysate: sc-2203 or RAT2 whole cell lysate: sc-364198.

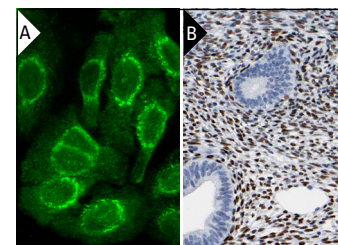
## RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



NAB2 (C-6): sc-28323. Western blot analysis of NAB2 expression in K-562 (A) and RAT2 (B) whole cell lysates.



NAB2 (C-6): sc-28323. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic, perinuclear and nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human endometrium tissue showing nuclear staining in cells in endometrial stroma. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

## SELECT PRODUCT CITATIONS

1. Hasan, R.N., et al. 2008. Hemin upregulates Egr-1 expression in vascular smooth muscle cells via reactive oxygen species ERK-1/2-Erk-1 and NFκB. *Circ. Res.* 102: 42-50.

## 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](http://www.scbt.com) for detailed protocols and support products.



See **NAB2 (1C4): sc-23867** for NAB2 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.