

# NAB2 (A-15): sc-12151

## 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.
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. Swirnoff, 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. Severson, B.R., et al. 2000. A novel activation function for NAB proteins in Egr-dependent transcription of the luteinizing hormone  $\beta$  gene. *J. Biol. Chem.* 275: 9749-9757.

## CHROMOSOMAL LOCATION

Genetic locus: NAB2 (human) mapping to 12q13.3.

## SOURCE

NAB2 (A-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NAB2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12151 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

## APPLICATIONS

NAB2 (A-15) is recommended for detection of NAB2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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 NAB2 siRNA (h): sc-36014, NAB2 shRNA Plasmid (h): sc-36014-SH and NAB2 shRNA (h) Lentiviral Particles: sc-36014-V.

Molecular Weight (predicted) of NAB2: 57 kDa.

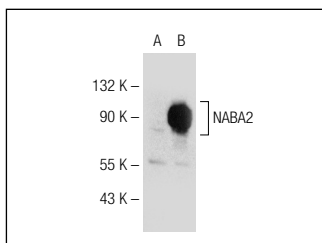
Molecular Weight (observed) of NAB2: 64 kDa.

Positive Controls: K-562 + PMA nuclear extract: sc-2131, NAB2 (h): 293T Lysate: sc-117107 or K-562 whole cell lysate: sc-2203.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



NAB2 (A-15): sc-12151. Western blot analysis of NAB2 expression in non-transfected: sc-117752 (A) and human NAB2 transfected: sc-117107 (B) 293T whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.