

NAB2 (H-180): sc-22815

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., Matheny, C. and Milbrandt, J. 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., Severson, B.R. and Milbrandt, J. 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 (H-180) is a rabbit polyclonal antibody raised against amino acids 346-525 mapping at the C-terminus of NAB2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NAB2 (H-180) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NAB2 (H-180) is also recommended for detection of NAB2 in additional species, including equine, canine, bovine and porcine.

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.

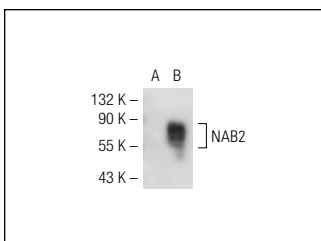
Molecular Weight (observed) of NAB2: 64 kDa.

Positive Controls: NAB2 (h): 293T Lysate: sc-117107.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NAB2 (H-180): sc-22815. Western blot analysis of NAB2 expression in non-transfected: sc-117752 (A) and human NAB2 transfected: sc-117107 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Mager, G.M., Ward, R.M., Srinivasan, R., Jang, S.W., Wrabetz, L. and Svaren, J. 2008. Active gene repression by the Egr2.NAB complex during peripheral nerve myelination. *J. Biol. Chem.* 283: 18187-18197.
2. Tur, G., Georgieva, E.I., Gagete, A., López-Rodas, G., Rodríguez, J.L. and Franco, L. 2010. Factor binding and chromatin modification in the promoter of murine Egr1 gene upon induction. *Cell. Mol. Life Sci.* 67: 4065-4077.
3. Hellstrom, I.C., Dhir, S.K., Diorio, J.C. and Meaney, M.J. 2012. Maternal licking regulates hippocampal glucocorticoid receptor transcription through a thyroid hormone-serotonin-NGFI-A signalling cascade. *Philos. Trans. R. Soc. Lond., B, Biol. Sci.* 367: 2495-2510.

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 or our catalog for detailed protocols and support products.