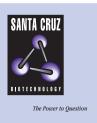
SANTA CRUZ BIOTECHNOLOGY, INC.

Nab2 (yS-18): sc-27727



BACKGROUND

Transcriptional control is in part regulated by interactions between DNAbound transcription factors, such as Egr-1/NGFI-A, and coregulatory proteins, such as NAB (for NGFI-A-binding proteins). The evolutionarily conserved NAB proteins, NAB1 and NAB2 are corepressors 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 has a predicted molecular mass of 56 kDa and localizes to chromosome 12q13.3-14.1, a region that is rearranged in several solid tumors, lipomas, and liposarcomas.

REFERENCES

- 1. Russo, M.W., et al. 1993. Transcriptioanl activity of the zinc finger protein NGFI-A is influenced by its interaction with a cellular factor. Mol. Cell. Biol. 13: 6858-6865.
- 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.
- Svaren, J., et al. 1996. NAB2, a corepressor of NGFI-A (Egr-1) and Kros20, is induced proliferative and differentiative stimuli. Mol. Cell. Biol. 16: 3545-3553.
- 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. 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.
- 6. Hector, R.E., et al. 2002. Dual requirement for yeast hnRNP Nab2p in mRNA poly(A) tail length control and nuclear export. EMBO J 21: 1800-1810.
- Gallardo, M., et al. 2003. Nab2p and the Thp1p-Sac3p complex functionally interact at the interface between transcription and mRNA metabolism. J. Biol. Chem 278: 24225-24232.
- Suntharalingam, M., et al. 2004. Nuclear export of the yeast mRNA-binding protein Nab2 is linked to a direct interaction with Gfd1 and to Gle1 function. J. Biol. Chem 279: 35384-35391.
- 9. Guisbert, K.K., et al. 2005. Functional specificity of shuttling hnRNPs revealed by genome-wide analysis of their RNA binding profiles. RNA. [Epub].

SOURCE

Nab2 (yS-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Nab2 of *Saccharomyces cerevisiae* origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27727 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Nab2 (yS-18) is recommended for detection of Nab2 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Nab2: 56 kDa.

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-2033 and Western Blotting Luminol Reagent: sc-2048.

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.