SANTA CRUZ BIOTECHNOLOGY, INC.

NaBC1 (H-300): sc-135015

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NaBC1 (novel amplified in breast cancer 1) is a protein found amplified in most breast carcinoma forms. It is expressed primarily as a cytoplasmic, detergent-stable homodimer that has a tendency to interact with DYNLL1 (PIN) and DYNLL2. Breast tumor lines that exhibit 20q13.2 gene amplification express much higher levels of the protein as compared to the levels found in other breast cancer lines that do not overexpress the NaBC1 mRNA. However, this upregulation does not affect growth rate or anchoring abilities of a cell, indicating the oncogenic properties of NaCB1 differ from that of other oncogenes.

REFERENCES

1. Collins, C., et al. 1998. Positional cloning of ZNF217 and NABC1: genes amplified at 20q13.2 and overexpressed in breast carcinoma. Proc. Natl. Acad. Sci. USA 95: 8703-8708.
2. Correa, R.G., et al. 2000. NaBC1 (BCAS1): alternative splicing and down-regulation in colorectal tumors. Genomics 65: 299-302.
3. Ishimoto, T., et al. 2002. Cloning and characterization of a novel synaptosome-enriched mRNA that encodes 31 kDa protein. Biochim. Biophys. Acta 1579: 189-195.
4. Zhao, C., et al. 2003. Elevated expression levels of NCoA-3, TOP1, and TFAP2C in breast tumors as predictors of poor prognosis. Cancer 98: 18-23.

CHROMOSOMAL LOCATION

Genetic locus: BCAS1 (human) mapping to 20q13.2.

SOURCE

NaBC1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of NaBC1 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

NaBC1 (H-300) is recommended for detection of NaBC1 of 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 NaBC1 siRNA (h): sc-62657, NaBC1 shRNA Plasmid (h): sc-62657-SH and NaBC1 shRNA (h) Lentiviral Particles: sc-62657-V.

Molecular Weight of NaBC1 monomer: 60 kDa.

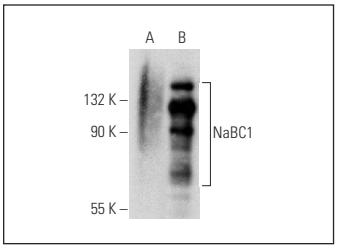
Molecular Weight of NaBC1 dimer: 120 kDa.

Positive Controls: NaBC1 (h2): 293T Lysate: sc-373076.

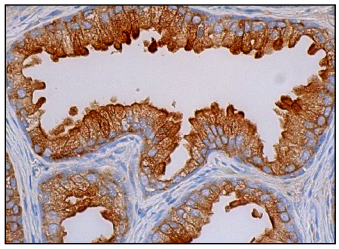
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



NaBC1 (H-300): sc-135015. Western blot analysis of NaBC1 expression in non-transfected: sc-117752 (**A**) and human NaBC1 transfected: sc-373076 (**B**) 293T whole cell lysates.



NaBC1 (H-300): sc-135015. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells.

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.