

NaBC1 (5): sc-136342

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 NaBC1 differ from that of other oncogenes.

REFERENCES

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- Correa, R.G., et al. 2000. NaBC1 (BCAS1): alternative splicing and down-regulation in colorectal tumors. *Genomics* 65: 299-302.
- 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.
- Zhao, C., et al. 2003. Elevated expression levels of NCOA3, TOP1, and TFAP2C in breast tumors as predictors of poor prognosis. *Cancer* 98: 18-23.
- Beardsley, D.I., et al. 2003. Characterization of the novel amplified in breast cancer-1 (NaBC1) gene product. *Exp. Cell Res.* 290: 402-413.

CHROMOSOMAL LOCATION

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

SOURCE

NaBC1 (5) is a mouse monoclonal antibody raised against amino acids 365-571 of NaBC1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NaBC1 (5) 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

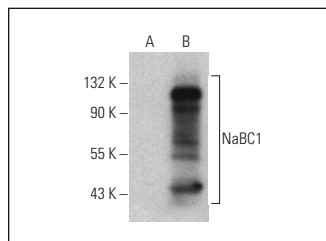
Molecular Weight of NaBC1 dimer: 120 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218 or NaBC1 (h): 293T Lysate: sc-372948.

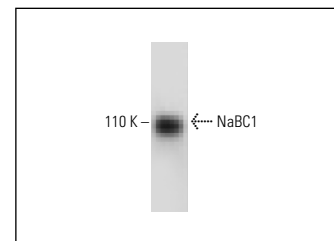
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



NaBC1 (5): sc-136342. Western blot analysis of NaBC1 expression in non-transfected: sc-117752 (A) and human NaBC1 transfected: sc-372948 (B) whole cell lysates.



NaBC1 (5): sc-136342. Western blot analysis of NaBC1 expression in SK-BR-3 whole cell lysate.

SELECT PRODUCT CITATIONS

- Bergner, C.G., et al. 2019. Microglia damage precedes major myelin breakdown in X-linked adrenoleukodystrophy and metachromatic leukodystrophy. *Glia* 67: 1196-1209.
- Galli, E., et al. 2019. GM-CSF and CXCR4 define a T helper cell signature in multiple sclerosis. *Nat. Med.* 25: 1290-1300.
- Cunha, M.I., et al. 2020. Pro-inflammatory activation following demyelination is required for myelin clearance and oligodendrogenesis. *J. Exp. Med.* 217: e20191390.
- Maas, D.A., et al. 2020. Interneuron hypomyelination is associated with cognitive inflexibility in a rat model of schizophrenia. *Nat. Commun.* 11: 2329.
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- Chavali, M., et al. 2020. Wnt-dependent oligodendroglial-endothelial interactions regulate white matter vascularization and attenuate injury. *Neuron* 108: 1130-1145.e5.
- Ulloa-Navas, M.J., et al. 2021. Ultrastructural characterization of human oligodendrocytes and their progenitor cells by pre-embedding immunogold. *Front. Neuroanat.* 15: 696376.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.