

# NaBC1 (F-4): sc-393740

## 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

- 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.
- 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 NCoA-3, TOP1, and TFAP2C in breast tumors as predictors of poor prognosis. *Cancer* 98: 18-23.
- Beardsley, D.J., et al. 2003. Characterization of the novel amplified in breast cancer 1 (NaBC1) gene product. *Exp. Cell Res.* 290: 402-413.
- Aust, D.E., et al. 2004. Prognostic relevance of 20q13 gains in sporadic colorectal cancers: a FISH analysis. *Scand. J. Gastroenterol.* 39: 766-772.

## CHROMOSOMAL LOCATION

Genetic locus: BCAS1 (human) mapping to 20q13.2; Bcas1 (mouse) mapping to 2 H3.

## SOURCE

NaBC1 (F-4) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of NaBC1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NaBC1 (F-4) is available conjugated to agarose (sc-393740 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393740 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393740 PE), fluorescein (sc-393740 FITC), Alexa Fluor<sup>®</sup> 488 (sc-393740 AF488), Alexa Fluor<sup>®</sup> 546 (sc-393740 AF546), Alexa Fluor<sup>®</sup> 594 (sc-393740 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-393740 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-393740 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-393740 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## RESEARCH USE

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

## APPLICATIONS

NaBC1 (F-4) is recommended for detection of NaBC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for NaBC1 siRNA (h): sc-62657, NaBC1 siRNA (m): sc-62658, NaBC1 shRNA Plasmid (h): sc-62657-SH, NaBC1 shRNA Plasmid (m): sc-62658-SH, NaBC1 shRNA (h) Lentiviral Particles: sc-62657-V and NaBC1 shRNA (m) Lentiviral Particles: sc-62658-V.

Molecular Weight of NaBC1 monomer: 60 kDa.

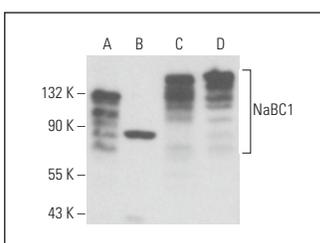
Molecular Weight of NaBC1 dimer: 120 kDa.

Positive Controls: mouse brain extract: sc-2253, MCF7 whole cell lysate: sc-2206 or SK-BR-3 cell lysate: sc-2218.

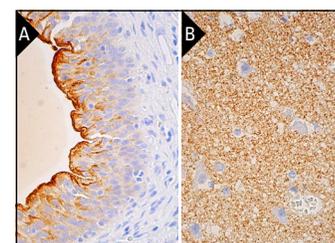
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



NaBC1 (F-4): sc-393740. Western blot analysis of NaBC1 expression in SK-BR-3 (A) and MCF7 (B) whole cell lysates and mouse brain (C) and rat brain (D) tissue extracts.



NaBC1 (F-4): sc-393740. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic staining of urothelial cells (A), and of human cerebral cortex tissue showing neuropil staining (B). Blocked with 0.25X UltraCruz<sup>®</sup> Blocking Reagent: sc-516214. Detection reagents used: m-IgGκ BP-B: sc-516142 and ImmunoCruz<sup>®</sup> ABC Kit: sc-516216.

## STORAGE

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

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