**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**


**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 IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**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: NaBC1 (h): 293T Lysate: sc-372948, 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-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® 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. Western blot analysis of NaBC1 expression in non-transfected 293T (A) and human NaBC1 transfected 293T: sc-117732 (A), human NaBC1 transfected SK-BR-3: sc-372948 (B) and SK-BR-3 (C) whole cell lysates.

**STORAGE**

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

**PROTOCOLS**

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