

## SNCG (breast cancer-specific protein 1) Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1065a

### **Specification**

## SNCG (breast cancer-specific protein 1) Antibody - Product Information

Application WB, IHC
Primary Accession O76070
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

**Description** 

SNCG(also designated gamma-synuclein or breast cancer-specific protein 1), with 127-amino acid protein(about 14kDa), belongs to the synuclein family, which also includes alpha- and beta-synuclein. Three synucleins are located in the neuronal cytosol and enriched in presynaptic terminals, while SNCG is also expressed in many other non-neuronal tissues. SNCG is abnormally expressed in a high percentage of tumor tissues of diversified cancer types, including liver, esophagus, colon, gastric, lung, prostate, cervical, and breast cancer, but rarely expressed in tumor-matched nonneoplastic adjacent tissues. High levels of SNCG have been identified in advanced breast carcinomas suggesting a correlation between overexpression of SNCG and breast tumor development.

### **Immunogen**

Purified recombinant fragment of SNCG expressed in E. Coli.

### **Formulation**

Purified antibody in PBS containing 0.03% sodium azide.

## SNCG (breast cancer-specific protein 1) Antibody - Additional Information

### **Gene ID** 6623

### **Other Names**

Gamma-synuclein, Breast cancer-specific gene 1 protein, Persyn, Synoretin, SR, SNCG, BCSG1, PERSYN, PRSN

#### **Dilution**

WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000

# **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

SNCG (breast cancer-specific protein 1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



## SNCG (breast cancer-specific protein 1) Antibody - Protein Information

#### Name SNCG

Synonyms BCSG1, PERSYN, PRSN

### **Function**

Plays a role in neurofilament network integrity. May be involved in modulating axonal architecture during development and in the adult. In vitro, increases the susceptibility of neurofilament-H to calcium-dependent proteases (By similarity). May also function in modulating the keratin network in skin. Activates the MAPK and Elk-1 signal transduction pathway (By similarity).

### **Cellular Location**

Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Note=Associated with centrosomes in several interphase cells. In mitotic cells, localized to the poles of the spindle

### **Tissue Location**

Highly expressed in brain, particularly in the substantia nigra. Also expressed in the corpus callosum, heart, skeletal muscle, ovary, testis, colon and spleen. Weak expression in pancreas, kidney and lung

# SNCG (breast cancer-specific protein 1) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## SNCG (breast cancer-specific protein 1) Antibody - Images

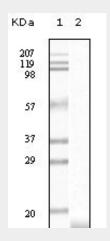


Figure 1: Western blot analysis using SNCG mouse mAb against truncated SNCG recombinant



protein.

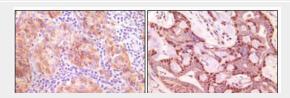


Figure 2: Immunohistochemical analysis of paraffin-embedded human ovary carcinoma (left) and breast carcinoma (right), showing cytoplasmic(ovary carcinoma) localization, cytoplasmic and nuclear (breast carcinoma) localization using SNCG mouse mAb with DAB staining.

# SNCG (breast cancer-specific protein 1) Antibody - References

1. Haiyan Liu, Wei Liu, Yinwei Wu. Cancer Res. 2005 Sep 1;65(17):7635-43. 2. Irina Surgucheva , Belinda McMahon , Andrei Surguchov. Cell Motil Cytoskeleton. 2006 May 26.