

SNCG (breast cancer-specific protein 1) Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1065a

Product Information

Application WB, IHC, E **Primary Accession** 076070 Reactivity Human Host Mouse Clonality Monoclonal **Clone Names** 1H10D2 Isotype IgG1 **Calculated MW** 13331

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.

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 E~~N/A

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.

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

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.

Images

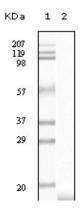


Figure 1: Western blot analysis using SNCG mouse mAb against truncated SNCG recombinant protein.

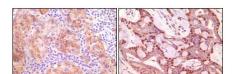


Figure 2: Immunohistochemical analysis of paraffin-embedded human ovary carcinoma (left) and breast carcinoma (right), showing cytoplasmic(ovary carcinoma) localization, cytoplasmic and nuclear (breast carcinoma) localization using SNCG mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.