SPNS2 (C-15): sc-130102



The Power to Question

BACKGROUND

SPNS2 (spinster homolog 2) is a 549 amino acid multi-pass membrane protein that belongs to the spinster subfamily of major facilitator proteins. The gene encoding SPNS2 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

- 1. Zhang, Z.Y., Zhao, Z.R., Adell, G., Jarlsfelt, I., Cui, Y.X., Kayed, H., Kleeff, J., Wang, M.W. and Sun, X.F. 2006. Expression of MAC30 in rectal cancers with or without preoperative radiotherapy. Oncology 71: 259-265.
- Nusbaum, R., Vogel, K.J. and Ready, K. 2006-2007. Susceptibility to breast cancer: hereditary syndromes and low penetrance genes. Breast Dis. 27: 21-50.
- Wilcox, C.B., Feddes, G.O., Willett-Brozick, J.E., Hsu, L.C., DeLoia, J.A. and Baysal, B.E. 2007. Coordinate upregulation of TMEM97 and cholesterol biosynthesis genes in normal ovarian surface epithelial cells treated with progesterone: implications for pathogenesis of ovarian cancer. BMC Cancer 7: 223.
- Ropolo, A., Grasso, D., Pardo, R., Sacchetti, M.L., Archange, C., Lo Re, A., Seux, M., Nowak, J., Gonzalez, C.D., Iovanna, J.L. and Vaccaro, M.I. 2007. The pancreatitis-induced vacuole membrane protein 1 triggers autophagy in mammalian cells. J. Biol. Chem. 282: 37124-37133.
- Tai, Y.C., Domchek, S., Parmigiani, G. and Chen, S. 2007. Breast cancer risk among male BRCA1 and BRCA2 mutation carriers. J. Natl. Cancer Inst. 99: 1811-1814.
- Yan, J., Jiang, J., Lim, C.A., Wu, Q., Ng, H.H. and Chin, K.C. 2007. BLIMP1 regulates cell growth through repression of p53 transcription. Proc. Natl. Acad. Sci. USA 104: 1841-1846.
- Moparthi, S.B., Arbman, G., Wallin, A., Kayed, H., Kleeff, J., Zentgraf, H. and Sun, X.F. 2007. Expression of MAC30 protein is related to survival and biological variables in primary and metastatic colorectal cancers. Int. J. Oncol. 30: 91-95.
- 8. Sauermann, M., Sahin, O., Sültmann, H., Hahne, F., Blaszkiewicz, S., Majety, M., Zatloukal, K., Füzesi, L., Poustka, A., Wiemann, S. and Arlt, D. 2008. Reduced expression of vacuole membrane protein 1 affects the invasion capacity of tumor cells. Oncogene 27: 1320-1326.

STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: SPNS2 (human) mapping to 17p13.3; Spns2 (mouse) mapping to 11 B4.

SOURCE

SPNS2 (C-15) is a purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of SPNS2 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SPNS2 (C-15) is recommended for detection of SPNS2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for SPNS2 siRNA (h): sc-106749, SPNS2 shRNA Plasmid (h): sc-106749-SH and SPNS2 shRNA (h) Lentiviral Particles: sc-106749-V.

Molecular Weight of SPNS2: 58 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

RESEARCH USE

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

PROTOCOLS

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

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