



# Epithelial sialomucin (140 C1): sc-52329

## BACKGROUND

Tumor markers are proteins found in various bodily fluids and tissues and are used in oncology to help detect the presence of cancer. There are two types of tumor markers: cancer-specific markers that are expressed by cancerous tissues, and tissue-specific markers that are expressed by non-cancerous tissues and, if elevated, may indicate tumor growth. Epithelial sialomucin, also known as ESM, Epithelial sialomucin or MAM-6 (milkfat globule membrane antigen 6), is a tumor marker that is found at normal levels in non-cancerous tissues and at higher levels in a variety of epithelial carcinomas. Located in the glycocalyx of normal glandular epithelial cells and in malignant glands of endocervical and endometrial tissues, Epithelial sialomucin is a mucus glycoprotein that functions as a marker for mammary and other skin appendage/epithelial tumors.

## REFERENCES

1. Tsubura, A., Morii, S., Hilken, J. and Hilgers, J. 1985. Expression of MAM-3 and MAM-6 antigens in endometrial and endocervical adenocarcinomas. *Virchows Arch. A Pathol. Anat. Histopathol.* 407: 59-67.
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4. Hilken, J. and Buijs, F. 1988. Biosynthesis of MAM-6, an Epithelial sialomucin. Evidence for involvement of a rare proteolytic cleavage step in the endoplasmic reticulum. *J. Biol. Chem.* 263: 4215-4222.
5. Yamada, K., Tanaka, T., Mori, M., Tsubura, A., Morii, S., Tsubone, M., Ando, C. and Hilgers, J. 1989. Immunohistochemical expression of MAM-3 and MAM-6 antigens in salivary gland tumours. *Virchows Arch. A Pathol. Anat. Histopathol.* 415: 509-521.
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8. Yamada, K., Kunikata, M., Mori, M., Chomette, G., Auriol, M., Vaillant, J.M., Tsubura, A., Morii, S. and Hilgers, J. 1991. Immunohistochemical localization of MAM-3 and MAM-6 antigens in adenoid cystic carcinoma. *J. Oral Pathol. Med.* 20: 57-63.

## CHROMOSOMAL LOCATION

Genetic locus: MUC4 (human) mapping to 3q29.

## SOURCE

Epithelial sialomucin (140 C1) is a mouse monoclonal antibody raised against isolated primary breast carcinoma cells of human origin.

## PRODUCT

Each vial contains 500 µl ascites containing IgG<sub>1</sub> with < 0.1% sodium azide.

## APPLICATIONS

Epithelial sialomucin (140 C1) is recommended for detection of Epithelial sialomucin, a mucus glycoprotein also known as MAM-6 (milkfat globule membrane antigen 6). Epithelial sialomucin (140 C1) is an excellent marker for various epithelial carcinomas of human origin by immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200).

## SELECT PRODUCT CITATIONS

1. Wang, L., Xu, D., Qiao, Z., Shen, L., Dai, H. and Ji, Y. 2016. Follicular dendritic cell sarcoma of the spleen: A case report and review of the literature. *Oncol. Lett.* 12: 2062-2064.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.