

Rat Tumor Marker (MG1): sc-73609

BACKGROUND

Tumor-associated marker proteins are beneficial for cancer diagnosis and assessment of cancer risk. They can also help to reveal tumor origination and can determine cancer recurrency. While few tumor markers are found in a single type of cancer, most are found in many different types of cancer. The first successful blood test for a common cancer detected carcinoembryonic antigen (CEA), a glycoprotein normally expressed before birth that was found in serum of individuals with colon cancer. The most widely used tumor marker tests for the prostate-specific antigen, which is most helpful in screening for prostate cancer in men. Common tumor markers include AFP for detection of hepatocellular carcinoma, Mucin 16 for detection of epithelial ovarian cancer, Neu for detection of breast cancer, S-100 for detection of melanoma and tPA for detection of rapidly dividing cells. Rat Tumor Marker recognizes a cell surface structure that is expressed by rat tumor cells of epithelial origin.

REFERENCES

1. Tsuboi, T., Honda, T., Hishida, S., Shigetomi, T., Ueda, M. and Sugiura, Y. 2004. A quantitative study of nerve fiber density in the submandibular gland of rats. *Nagoya J. Med. Sci.* 67: 25-34.
2. Sugiyama, Y. and Kawaguchi, Y. 2005. Tissue polypeptide antigen (TPA). *Nippon Rinsho* 63 Suppl. 8: 705-707.
3. Nicolini, A., Carpi, A. and Tarro, G. 2006. Biomolecular markers of breast cancer. *Front. Biosci.* 11: 1818-1843.
4. MacKenzie, R. 2007. Recollections of the carcinoembryonic antigen as played on a blue guitar. *J. Insur. Med.* 39: 232-236.
5. Grewal, J. and Kesari, S. 2008. Breast cancer surface receptors predict risk for developing brain metastasis and subsequent prognosis. *Breast Cancer Res.* 10: 104.
6. Nadler, R.B. 2008. The case for prostate-specific antigen screening starting at age 40. *Cancer* 113: 1278-1281.
7. Park, J.W., Neve, R.M., Szollosi, J. and Benz, C.C. 2008. Unraveling the biologic and clinical complexities of HER-2. *Clin. Breast Cancer* 8: 392-401.
8. McLerran, D., Grizzle, W.E., Feng, Z., Bigbee, W.L., Banez, L.L., Cazares, L.H., Chan, D.W., Diaz, J., Izbicka, E., Kagan, J., Malehorn, D.E., Malik, G., Oelschlagel, D., Partin, A., Randolph, T., Rosenzweig, N., Srivastava, S., et al. 2008. Analytical validation of serum proteomic profiling for diagnosis of prostate cancer: sources of sample bias. *Clin. Chem.* 54: 44-52.
9. Rosenberg, C.L. 2008. Polysomy 17 and HER-2 amplification: true, true, and unrelated. *J. Clin. Oncol.* 26: 4856-4858.

SOURCE

Rat Tumor Marker (MG1) is a mouse monoclonal antibody raised against CC531 colon adenocarcinoma cells of rat origin.

PRODUCT

Each vial contains 500 μ l culture supernatant containing IgG_{2a} with < 0.1% sodium azide.

APPLICATIONS

Rat Tumor Marker (MG1) is recommended for detection of Rat Tumor Marker of mouse and rat origin by Western Blotting (starting dilution to be determined by re-searcher, dilution range 1:10-1:200), immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200), immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200) and flow cytometry (10-20 μ l per 1×10^6 cells).

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 for detailed protocols and support products.