

GTAM5 Marker (4i310): sc-71195

BACKGROUND

Gastric carcinoma can develop in any part of the stomach and spread from there to numerous other organs, particularly the esophagus and the small intestine. An early diagnosis of carcinoma as well as discrimination between benign and malignant conditions is difficult and very important. Carcinoma cells produce exclusive proteins that are important in the identification and treatment of the disease. Tumors, more specifically their membranes, retain unique proteins that may be useful cancer markers. GTAM5 (gastrointestinal tumor associated marker 5) is one such protein with an especially high specificity for malignancy. GTAM5 is expressed in various tissues including the luminal and apical cytoplasm of pancreatic cancer cells, lung, colon and gastric carcinomas.

REFERENCES

1. Hilkens, J., Buijs, F., Hilgers, J., Hageman, P., Calafat, J., Sonnenberg, A. and van der Valk, M. 1984. Monoclonal antibodies against human milk-fat globule membranes detecting differentiation antigens of the mammary gland and its tumors. *Int. J. Cancer* 34: 197-206.
2. Itzkowitz, S.H., Yuan, M., Ferrell, L.D., Ratcliffe, R.M., Chung, Y.S., Satake, K., Umeyama, K., Jones, R.T. and Kim, Y.S. 1987. Cancer-associated alterations of blood group antigen expression in the human pancreas. *J. Natl. Cancer Inst.* 79: 425-434.
3. Ho, J.J., Bi, N., Yan, P.S., Yuan, M., Norton, K.A. and Kim, Y.S. 1991. Characterization of new pancreatic cancer-reactive monoclonal antibodies directed against purified mucin. *Cancer Res.* 51: 372-380.
4. Byrd, J.C., Ho, J.J., Lampert, D.T., Ho, S.B., Siddiki, B., Huang, J., Yan, P.S. and Kim, Y.S. 1991. Relationship of pancreatic cancer apomucin to mammary and intestinal apomucins. *Cancer Res.* 51: 1026-1033.
5. Yonezawa, S., Tachikawa, T., Shin, S. and Sato, E. 1992. Sialosyl-Tn antigen. Its distribution in normal human tissues and expression in adenocarcinomas. *Am. J. Clin. Pathol.* 98: 167-174.
6. Osako, M., Yonezawa, S., Siddiki, B., Huang, J., Ho, J.J., Kim, Y.S. and Sato, E. 1993. Immunohistochemical study of mucin carbohydrates and core proteins in human pancreatic tumors. *Cancer* 71: 2191-2199.
7. Siddiki, B., Ho, J.J., Huang, J., Byrd, J.C., Lau, E., Yuan, M. and Kim, Y.S. 1993. Monoclonal antibody directed against colon cancer mucin has high specificity for malignancy. *Int. J. Cancer* 54: 467-474.

SOURCE

GTAM5 Marker (4i310) is a mouse monoclonal antibody raised against GTAM5 of human origin.

PRODUCT

Each vial contains 500 µl culture supernatant containing IgG₁ with < 0.1% sodium azide.

PROTOCOLS

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

APPLICATIONS

GTAM5 Marker (4i310) is recommended for detection of GTAM5 of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:200), 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).

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.