

Lung Carcinoma (MOC-31): sc-52344

BACKGROUND

Lung cancer is defined as the malignant metamorphosis and expansion of lung tissue. The most deadly of all cancers, Lung Carcinoma is responsible for an average of 3 million deaths annually. Initially an illness predominantly affecting males, incidence in women continues to increase, most likely a result of the emerging ratio of female to male smokers. Lung cancer currently remains the leading cause of cancer death in women, overshadowing breast cancer, ovarian cancer and uterine cancers combined. Current research indicates that the factor with the greatest impact on risk of lung cancer is long-term exposure to inhaled carcinogens. There are two major types of Lung Carcinoma: non-small cell, which accounts for 80% of all cases; and small cell, which accounts for roughly 20% of all lung cancers reported. The lung continues to be a customary place for cancer migration from tumors elsewhere in the body. Treatment depends on the specific cell type of the cancer, level of progression and status of the individual patient.

REFERENCES

1. Berendsen, H.H., de Leij, L., Postmus, P.E., Ter Haar, J.G., Poppema, S. and The, T.H. 1988. Detection of small cell lung cancer metastases in bone marrow aspirates using monoclonal antibody directed against neuroendocrine differentiation antigen. *J. Clin. Pathol.* 41: 273-276.
2. Maimonis, P., Hayes, D.F., Schaffel, S. and Kufe, D. 1991. Lung cancer-associated protein: development and characterization of a new assay that detects a circulating lung cancer marker. *Cancer Res.* 51: 3838-3842.
3. Tsuji, K., Uwano, T., Yoshida, Y., Kikuchi, K., Okamoto, T., Yamamoto, S., Ichiki, M., Hayashi, I., Ohno, T. and Kufe, D.W. 1997. Detection of the circulating lung cancer marker LCAP with a new monoclonal antibody TRD-L1. *Int. J. Biol. Markers* 12: 49-54.
4. Sher, Y.P., Shih, J.Y., Yang, P.C., Roffler, S.R., Chu, Y.W., Wu, C.W., Yu, C.L. and Peck, K. 2005. Prognosis of non-small cell lung cancer patients by detecting circulating cancer cells in the peripheral blood with multiple marker genes. *Clin. Cancer Res.* 11: 173-179.
5. Xu, H., Lu, D.W., El-Mofty, S.K. and Wang, H.L. 2005. Metachronous squamous cell carcinomas evolving from independent oropharyngeal and pulmonary squamous papillomas: association with human papillomavirus 11 and lack of aberrant p53, Rb, and p16 protein expression. *Hum. Pathol.* 35: 1419-1422.
6. Haura, E.B., Livingston, S. and Coppola, D. 2006. Autocrine interleukin-6/interleukin-6 receptor stimulation in non-small cell lung cancer. *Clin. Lung Cancer* 7: 273-275.
7. Chong, I.W., Chang, M.Y., Chang, H.C., Yu, Y.P., Sheu, C.C., Tsai, J.R., Hung, J.Y., Chou, S.H., Tsai, M.S., Hwang, J.J. and Lin, S.R. 2006. Great potential of a panel of multiple hMTH1, SPD, ITGA11 and COL11A1 markers for diagnosis of patients with non-small cell lung cancer. *Oncol. Rep.* 16: 981-988.
8. Jung, C.K., Jung, J.H., Park, G.S., Lee, A., Kang, C.S. and Lee, K.Y. 2006. Expression of transforming acidic coiled-coil containing protein 3 is a novel independent prognostic marker in non-small cell lung cancer. *Pathol. Int.* 56: 503-509.

SOURCE

Lung Carcinoma (MOC-31) is a mouse monoclonal antibody raised against small cell lung carcinoma of human origin.

PRODUCT

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

APPLICATIONS

Lung Carcinoma (MOC-31) is recommended for detection of Lung Carcinoma 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).

Molecular Weight of Lung Carcinoma: 40 kDa.

SELECT PRODUCT CITATIONS

1. Bahador, M., Gras Navarro, A., Rahman, M.A., Dominguez-Valentin, M., Sarowar, S., Ulvestad, E., Njolstad, G., Lie, S.A., Kristoffersen, E.K., Bratland, E. and Chekenya, M. 2017. Increased infiltration and tolerised antigen-specific CD8⁺ TEM cells in tumor but not peripheral blood have no impact on survival of HCMV⁺ glioblastoma patients. *Oncoimmunology* 6: e1336272.

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.