# IPO-38 (SPM515): sc-135724



The Power to Question

## **BACKGROUND**

IPO-38, also known as non-lineage 116 (N-L116), is an antigen present in the nuclei of proliferating cells. It can be detected in different forms of leukemias as well as Hodgkin's disease and non-Hodgkin's lymphomas, breast and colorectal carcinomas and PHA-stimulated lymphocytes. Upregulated in gastric cancer, IPO-38 is also a promising biomarker for predicting the prognosis of gastric cancer. In addition, sequence analysis of the IPO-38 antigen, immunoprecipitated from a gastric cancer cell line, suggests that IPO-38 may be a modified form of the Histone H2B antigen. The presence of nuclear IPO-38 antigen has been identified in different human and murine lymphoid and non-lymphoid cell lines, but not in mononuclear cells and granulocytes of healthy donors. IPO-38 is thus a proliferation marker that may be useful when monitoring tumor progression.

# **REFERENCES**

- Sidorenko, S.P., Vetrova, E.P., Iurchenko, O.V., Shlapatskaia, L.N., Berdova, A.G., Elenskaia, A.M., Bal'shin, M.D. and Gluzman, D.F. 1990. Monoclonal antibodies of the IPO series in studying and diagnosing malignant lymphoproliferative diseases. Gematol. Transfuziol. 35: 19-22.
- Sidorenko, S.P., Vetrova, E.P., Yurchenko, O.V., Berdova, A.G., Shlapatskaya, L.N. and Gluzman, D.F. 1992. Monoclonal antibodies of IPO series against B cell differentiation antigens in leukemia and lymphoma immunophenotyping. Neoplasma 39: 3-9.
- 3. Mikhalap, S.V., Shlapatskaya, L.N., Yurchenko, O.V., Berdova, A.G., Gluzman, D.F. and Sidorenko, S.P. 1997. Monoclonal antibody IPO-38 recognizes a novel nuclear antigen of proliferating cells. In Kishimoto, T., Kikutani, H., von dem Borne, A.E.G. Kr., Goyert, S.M., Mason, D.Y., Miyasaka, M., Moretta, L., Okumura, K., Shaw, S., Springer, T.A., Sugamura, K. and Zola, H., eds., Leucocyte Typing VI. New York and London: Garland Publishing, Inc., 609-610.
- Thosaporn, W., Iamaroon, A., Pongsiriwet, S. and Ng, K.H. 2004. A comparative study of epithelial cell proliferation between the odontogenic keratocyst, orthokeratinized odontogenic cyst, dentigerous cyst, and ameloblastoma. Oral. Dis. 10: 22-26.
- 5. Zhou, G.B., Chen, S.J. and Chen, Z. 2005. Acute promyelocytic leukemia: a model of molecular target based therapy. Hematology 1: 270-80.
- 6. Di Croce, L. 2005. Chromatin modifying activity of leukaemia associated fusion proteins. Hum. Mol. Genet. 14: 77-84.
- Hao, Y., Yu, Y., Wang, L., Yan, M., Ji, J., Qu, Y., Zhang, J., Liu, B. and Zhu,
  2. 2008. IPO-38 is identified as a novel serum biomarker of gastric cancer based on clinical proteomics technology. J. Proteome Res. 7: 3668-3677.

## **SOURCE**

IPO-38 (SPM515) is a mouse monoclonal antibody raised against spleen cells of a patient with hairy cell leukemia of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

IPO-38 (SPM515) is recommended for detection of IPO-38 of mouse, rat and human origin by immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/ 2.0 ml). 2) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## **STORAGE**

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

#### **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.

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