

MONOCLONAL ANTIBODY CD15

Cat. No.	Form	Quantity	Presentation
1921	Concentrated	1 ml	Liquid

Clone 80H5

Isotype IgM kappa (mouse)

Immunogen Human granulocytes from healthy donor.

Specificity 80H5 antibody recognizes the X hapten (3-fucosyl-N-acetyl-lactosamine), an early myeloid differentiation antigen (1).

Normal cells: 80H5 antibody reacts with granulocytes. Occasionally, epithelioid histiocytes may be weakly positive. After neuraminidase digestion, it recognizes the Langerhans cells of the skin and the interdigitating reticulum cells. Many epithelial cells such as gastric glands, squamous cells and kidney tubules are commonly found to be positive (2-4).

Tumor cells: Studies have shown that CD15 antibody reacts with Hodgkin's and Reed-Stenberg cells in Hodgkin's disease. Occasionally, some T-cell lymphomas are also stained. Myeloid leukemic blasts may also be positive. Some adenocarcinomas and squamous cell carcinomas react with CD15 antibody. Mesotheliomas are usually negative (2-4).

Staining pattern: mostly membrane, but paranuclear and occasionally diffuse cytoplasmic reactivity may be observed.

Positive Control Granulocytes in any tissue fixed and processed in the same manner as the test tissue.

Applications Immunohisto and cytochemical staining of CD15 in Hodgkin's disease studies and for the detection of Reed-Stenberg cells. Atypical lympho-histiocytic cells (L & H) of lymphocyte predominance Hodgkin's disease are usually negative. Studies indicate that CD15 antibodies may also be useful in the characterization of some immature myeloid cells in different tissues (4).

Buffer 2 mg/ml bovine serum albumin in phosphate buffered saline containing 0.1% sodium azide.

Storage The antibody should be stored at 2-8°C. Do not freeze.

September 18, 1995



Recommended Procedures

80H5 antibody is for use on cytological samples, frozen sections, and routinely fixed (B5, Bouin's, Dubosq-Brasil, Zenker's and formalin) paraffin-embedded tissue sections.

For a better demonstration of Sternberg-Reed cells, Hodgkin's cells and Langerhans cells, neuramidase digestion is recommended (2).

Process immunostaining according to previously described methods (4). CD15 antibody should be diluted to 1:50 prior to use and incubated on tissue sections for 60 minutes at room temperature.

References

- 1) Mannoni, P., Janowska-Wieczorek, A., Turner, A.R., McGann, L., TURC, J.M., " Monoclonal antibodies against human granulocytes and myeloid differentiation antigens ", 1982, Human Immunology, 5, 309-323.
- 2) Su-Ming Hsu, Yat-Sen Ho, Li, P-J., Monheit, J., Ree, H.J., Sheibani, K., Winberg, C.D., " L&H variants of Reed-Sternberg cells express Sialylated Leu M1 antigen ", 1986, Am. J. Pathol., 122, 199-203.
- 3) Chittal, S.M., Caveriviere, P., Schwarting, R., Gerdes, J., Al Saati, T., Rigal-Huguet, F., Stein, H., Delsol, G. " Monoclonal antibodies in the diagnosis of Hodgkin's disease. The search for a rational panel ", 1988, Am. J. Pathol., 12, 9-21.
- 4) Leong, A.S.Y., " Immunohistochemistry: theoretical and practical aspects ", 1993, In Applied Immunohistochemistry for the Surgical Pathologist, Leong A.S.Y. Ed., Edward Arnold, London, pp. 2-22.

