

MONOCLONAL ANTIBODY CD30 (Ki-1 antigen)

| Cat. No. | Form | Quantity | Presentation |
|----------|-------------|----------|--------------|
| 1068 | Pre-diluted | 6 ml | Ready-to-use |

Clone HRS-4

Isotype IgG1 (mouse).

Immunogen Cell line, L 540, derived from Hodgkin's disease.

Specificity Reacts with a glycoprotein of 105-120 kDa (Ki-1 antigen) (1).

Normal cells: HRS-4 monoclonal antibody reacts with scattered large lymphoid cells (immunoblasts) at the rim of germinal centers and in interfollicular areas in most lymphoid tissues. Occasionally, plasma cells may be positive for HRS-4. It does not label macrophages or any other cell type. Occasional reactivity can be found on immature erythroblasts and on megacaryocytes (cytoplasmic staining) (2,3).

Tumor cells: Studies have shown that CD30 antibody reacts strongly with Reed-Sternberg cells in Hodgkin's disease, and with anaplastic large cell (ALC) lymphomas of T, B, or null-cell types, most of which were thought to be "malignant histiocytosis". Since ALC lymphomas express the Ki-1 antigen, they are frequently referred to as "Ki-1 lymphomas". Occasional large cells in other non-Hodgkin's lymphomas may be positive (i.e., mycosis fungoides, pleomorphic T-cell lymphomas and Lennert's lymphoma). Embryonal carcinomas are usually positive for CD30 antibody (2,4).

Staining pattern: membrane: often dot-like labeling can be seen in the Golgi region.

Positive Control Immunoblasts in lymphoid tissues (lymph node, spleen, tonsils) fixed and processed in the same manner as the test tissue.

Applications Immunohisto and cytochemical staining of CD30 in Reed-Sternberg cells and Hodgkin's cells, anaplastic large cell lymphoma (Ki-1 lymphomas) by immunomorphologic criteria and Ki-1 lymphomas.

Buffer 50 mM Tris-HCl, 0.15 M NaCl, pH 7.4 containing 1 mg/ml bovine serum albumin and 0.1% sodium azide. The buffer contains a green dye.

Storage The antibody solution should be stored at 2-8°C.

Recommended Procedures HRS-4 antibody is ready for use on cytological samples, frozen sections, and routinely fixed (B5, Bouin's, Dubosq-Brasil, Zenker's and formalin), paraffin-embedded tissue sections. Process immunostaining according to previously

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FOR RESEARCH USE ONLY - NOT FOR USE IN DIAGNOSTIC PROCEDURES



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described methods (4).

Trypsin treatment of sections may enhance staining intensity (5, 6): sections should be treated with a Trypsin solution (0.1FIP-U per ml of Phosphate-Buffered Saline (PBS) or Tris Buffer Saline (TBS) at 37°C for 10-20 minutes. The reaction should be stopped in water.

References

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- 2) Chuang, KL., Arber, DA., Weiss, LK., (1993) « CD30. » Applied Immunohistochemistry, 1: 244-255.
- 3) Rudolph, P., Lappe, T., Schmidt, D., (1993) "Expression of CD30 and nerve growth factor-receptor in neoplastic and reactive vascular lesions", Histopathology, 23, 173-178.
- 4) Pallesen, G., (1990) "The diagnostic significance of the CD30 (Ki-1) antigen", Histopathology, 16, 409-413.
- 5) Curran, RC. and Gregory, J. (1977) "The unmasking of antigens in paraffin sections of tissue by trypsin", Experientia, 33: 1400.
- 6) Szekeres, G., Audouin, J., Le Tourneau, A., (1994) "Is immunolocalization of antigens in paraffin sections dependent on methods of antigen retrieval?", Appl. Immunohistochem., 2:137-140.