

DATA SHEET

CD5 Ab-1 (Clone 4C7)

Mouse Monoclonal Antibody

Cat. #09246, 09247, or 09245 (0.1ml, 0.5ml, or 1.0ml Supernatant)

Cat. #09244 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

Description: The CD5, a transmembrane protein, is found on 95% of thymocytes and 72% of peripheral blood lymphocytes. In lymph nodes, the main reactivity is observed in T cell areas. CD5 is expressed by many T cell leukemia, lymphomas, and activated T cells. Occasionally, CD5 antigen is also expressed on a subset of B cells. Mantle cell lymphomas (same as diffuse centrocytic lymphomas) are CD5+ while the follicle center cell lymphoma are CD5-.

Comments: Ab-1 is excellent for identifying the formalin- paraffin sections of mantle cell lymphomas. Note that Ab-1 is not suitable for frozen tissues.

Mol. Wt. of Antigen: 67kDa

Epitope: External domain

Species Reactivity: Human. Does not react with rat. Others-not known.

Clone Designation: 4C7

Ig Isotype / Light Chain: IgG₁ / κ

Immunogen: Recombinant protein corresponding to the external domain of the CD5 molecule.

Applications and Suggested Dilutions:

- Immunohistology (Formalin/paraffin only) (Ab 1:40-1:80 for 30 min at RT)
- * [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Tonsil

Cellular Localization: Cell membrane

Supplied As:

Tissue culture supernatant with 0.09% sodium azide,

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Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Storage and Stability:

Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months.



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Suggested References:

- 1. Berezowski K; et al. American Journal of Clinical Pathology, 1996 Oct, 106(4):483-6.
- 2. Ferry JA; et al. American Journal of Clinical Pathology, 1996 Jan, 105(1):31-7.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Dianova is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

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Additional Suggested References:

- 1. Gagneten D; Hijazi YM; Jaffe ES; Solomon D. Mantle cell lymphoma: a cytopathological and immunocytochemical study. Diagnostic Cytopathology, 1996 Feb, 14(1):32-7.
- 2. Loyson SA; de Boer CJ; Schuuring E; Kluin PM; van Krieken JH. Mantle cell lymphoma. A morphological, immunohistochemical and molecular genetic study. Pathology, Research and Practice, 1996 Aug, 192(8):781-9.
- 3. Ueda G; Oka K; Matsumoto T; Yatabe Y; Yamanaka K; Suyama M; Ariyama J; Futagawa S; Mori N. Primary hepatic marginal zone B-cell lymphoma with mantle cell lymphoma phenotype. Virchows Archiv, 1996 Jul, 428(4-5):311-4.
- 4. Yatabe Y; Nakamura S; Seto M; Kuroda H; Kagami Y; Suzuki R; Ogura M; Kojima M; Koshikawa T; Ueda R; et al. Clinicopathologic study of PRAD1/cyclin D1 overexpressing lymphoma with special reference to mantle cell lymphoma. A distinct molecular pathologic entity. American Journal of Surgical Pathology, 1996 Sep, 20(9):1110-22.
- 5. Zoldan MC; Inghirami G; Masuda Y; Vandekerckhove F; Raphael B; Amorosi E; Hymes K; Frizzera G. Large-cell variants of mantle cell lymphoma: cytologic characteristics and p53 anomalies may predict poor outcome. British Journal of Haematology, 1996 May, 93(2):475-86.
- 6. Alkan S; Schnitzer B; Thompson JL; Moscinski LC; Ross CW. Cyclin D1 protein expression in mantle cell lymphoma. Annals of Oncology, 1995 Jul, 6(6):567-70.
- 7. de Boer CJ; Schuuring E; Dreef E; Peters G; Bartek J; Kluin PM; van Krieken JH. Cyclin D1 protein analysis in the diagnosis of mantle cell lymphoma. Blood, 1995 Oct 1, 86(7):2715-23.
- 8. Wojcik EM; Katz RL; Fanning TV; el-Naggar A; Ordonez NG; Johnston D. Diagnosis of mantle cell lymphoma on tissue acquired by fine needle aspiration in conjunction with immunocytochemistry and cytokinetic studies. Possibilities and limitations. Acta Cytologica, 1995 Sep-Oct, 39(5):909-15.
- 9. Zukerberg LR; Yang WI; Arnold A; Harris NL. Cyclin D1 expression in non-Hodgkin's lymphomas. Detection by immunohistochemistry. American Journal of Clinical Pathology, 1995, 103(6):756-60.
- 10. Abe M; Tominaga K; Wakasa H. Phenotypic characterization of human B-lymphocyte subpopulations, particularly human CD5+ B-lymphocyte subpopulation within the mantle zones of secondary follicles. Leukemia, 1994, 8(6):1039-44.
- 11. Bertero M; Novelli M; Fierro MT; Bernengo MG. Mantle zone lymphoma: an immunohistologic study of skin lesions. Journal of the American Academy of Dermatology, 1994 Jan, 30(1):23-30.
- 12. De Wolf-Peeters C; Pittaluga S. Mantle-cell lymphoma. Annals of Oncology, 1994, 1:35-7.
- 13. Giam YC; Ong BH. Clinicopathological and immunohistological correlation of malignant lymphomas of the skin. Annals of the Academy of Medicine, Singapore, 1994 May, 23(3):412-7.
- 14. Hishima T; Fukayama M; Fujisawa M; Hayashi Y; Arai K; Funata N; Koike M. CD5 expression in thymic carcinoma. American Journal of Pathology, 1994 Aug, 145(2):268-75.
- 15. Oka K; Mori N; Yatabe Y. Immunohistochemical characteristics of monocytoid B cell lymphoma, mantle zone lymphoma, small lymphocytic lymphoma (or B chronic lymphocytic leukemia), and hairy cell leukemia [see comments]. Acta Haematologica, 1993, 90(2):84-9.
- 16. Sundeen JT; Longo DL; Jaffe ES. CD5 expression in B-cell small lymphocytic malignancies. Correlations with clinical presentation and sites of disease. American Journal of Surgical Pathology, 1992 Feb, 16(2):130-7.