

Novocastra™ Liquid Mouse Monoclonal Antibody CD99

Product Code: NCL-L-CD99-187

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human CD99
Clone	PCB1
Ig Class	IgG1
Antigen Used for Immunizations	Prokaryotic recombinant protein corresponding to 101 amino acids of the N-terminal region of the human CD99 molecule.
Hybridoma Partner	Mouse myeloma (p3-NS1-Ag4.1).
Preparation	Liquid tissue culture supernatant containing sodium azide. Volume as indicated on vial label.
Effective on Frozen Tissue	Not evaluated.
Effective on Paraffin Wax Embedded Tissue	Yes.
Recommendations on Use	Immunohistochemistry on paraffin sections. Heat Induced Epitope Retrieval (HIER): Please follow the instructions for use in Novocastra Epitope Retrieval Solution pH 6. Suggested dilution: 1:100 for 30 minutes at 25 °C. This is provided as a guide and users should determine their own optimal working dilutions. Visualization: Please follow the instructions for use in the Novolink™ Polymer Detection Systems. For further product information or support, contact your local distributor or regional office of Leica Biosystems, or alternatively, visit the Leica Biosystems' Web site, www.LeicaBiosystems.com . <u>The performance of this antibody should be validated when utilized with other manual staining systems or automated platforms.</u>
Positive Controls	Immunohistochemistry: Tonsil.
Staining Pattern	Membrane
Storage and Stability	Store liquid antibody at 2-8 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. Prepare working dilutions on the day of use.
Warnings and Precautions	This reagent has been prepared from the supernatant of cell culture. As it is a biological product, reasonable care should be taken when handling it. This reagent contains sodium azide. A Material Safety Data Sheet is available upon request or available from www.LeicaBiosystems.com



General Overview

CD99 is a 32 kDa transmembrane glycoprotein, encoded by the MIC2 gene, which is located in the pseudoautosomal region of the human X and Y chromosomes. Recently, the MIC2 gene has been shown to encode two distinct proteins which are produced by alternative splicing of the CD99 gene transcript and are identified as bands of 30 and 32 kDa (p30/32). Although its function is not fully understood, CD99 has been implicated in various cellular processes including homotypic aggregation of T cells, upregulation of T cell receptor and MHC molecules, apoptosis of immature thymocytes and leukocyte diapedesis. CD99 is reported to be expressed on most human tissues including cortical thymocytes, pancreatic islet cells, Leydig and Sertoli cells, virtually all hematopoietic cell types (except granulocytes), peripheral blood lymphocytes, granulosa cells of the ovary, endothelial cells and basal/parabasal squamous epithelial cells. CD99 expression has been reported in a wide range of tumors, including Ewing's sarcoma and T cell lymphoma.

General References

Hameed M. Archives of Pathology and Laboratory Medicine. 2007; 131:192–204.
Schenkel A, Mamdouh Z, Chen X et al. Nature Immunology. 2002; 3(2):143–150.