

Novocastra™ Liquid Mouse Monoclonal Antibody CD33

Product Code: NCL-L-CD33

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human CD33 antigen, both isoforms; CD33m (31 kD) and CD33M (67 kD).
Clone	PWS44
Ig Class	IgG2b
Antigen Used for Immunizations	Prokaryotic recombinant protein corresponding to a region of the C2 domain of the human CD33 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 9. 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> Western Blotting: Typical working dilution 1:100–1:500.
Positive Controls	Immunohistochemistry: Bone marrow or granulocytic sarcoma. Western Blotting: U937 cell line.
Staining Pattern	Cytoplasmic and Membrane.
Storage and Stability	Store at 2–8 °C. Do not freeze. Return to 2–8 °C immediately after use. Do not use after expiration date indicated on the vial label. Storage conditions other than those specified above must be verified by the user.
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

The CD33 molecule is the smallest member of the structurally related group of IgSF domain-containing sialic acid binding proteins called the sialoadhesin family. CD33 antigen is reported to be absent from pluripotential stem cells but appears on the myelomonocytic precursors after CD34 antigen. It then continues to be expressed on both the myeloid and monocyte lineages, although it is reported to be absent on granulocytes.

General References

Bradshaw EM, Chibnik LB, Keenan BT, et al. *Nature Neuroscience*. 2013, 16(7): 848 – 852.
Hoyer JD, Grogg KL, Hanson CA, et al. *American Journal of Clinical Pathology*. 2008; 129(2): 316 – 323.