

Novocastra™ Lyophilized Mouse Monoclonal Antibody CD16

Product Code: NCL-CD16

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human CD16 antigen.
Clone	2H7
Ig Class	IgG2a
Antigen Used for Immunizations	Prokaryotic recombinant protein corresponding to the external domain of the CD16 molecule, common to both the transmembrane form and the GPI-linked form.
Hybridoma Partner	Mouse myeloma (p3-NS1-Ag4-1).
Preparation	Lyophilized tissue culture supernatant containing sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.
Effective on Frozen Tissue	No.
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: 1:80 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 staining of macrophage, neutrophils, NK cells and granulocytes.
Storage and Stability	Store unopened lyophilized 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. The reconstituted antibody is stable for at least two months when stored at 2-8 °C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 °C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. 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





B I O S Y S T E M S

General Overview

CD16 antigen has a molecular weight of 50 to 70 kD and is a low affinity Fc receptor for complexed IgG-Fc gamma RIII, expressed on natural killer (NK) cells, granulocytes, activated macrophages and a subset of T cells expressing alpha-beta or gamma-delta T cell antigen receptors. The CD16 antigen exists both as a glycosyl-phosphatidylinositol (GPI)-anchored protein in polymorphonuclear cells and as a transmembrane anchored protein in NK cells.

General References

Venneker G T, Das P K, Meinardi M M H M, et al.. *Journal of Pathology*. 172: 189–197 (1994).
Tuijnman W B, Van Wichen D F and Schuurman H-J. *APMIS*. 101: 319–329 (1993).