

# Novocastra™ Liquid Mouse Monoclonal Antibody CD68

## Product Code: NCL-L-CD68

<b>Intended Use</b>	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
<b>Specificity</b>	Human CD68 antigen.
<b>Clone</b>	514H12
<b>Ig Class</b>	IgG2a, kappa
<b>Antigen Used for Immunizations</b>	Prokaryotic fusion protein corresponding to the carboxy-terminal half of the external domain of the human CD68 molecule.
<b>Hybridoma Partner</b>	Mouse myeloma (p3-NS1-Ag4-1).
<b>Preparation</b>	Liquid tissue culture supernatant containing sodium azide. Volume as indicated on vial label.
<b>Effective on Frozen Tissue</b>	Yes (Acetone fixation required).
<b>Effective on Paraffin Wax Embedded Tissue</b>	Yes
<b>Recommendations on Use</b>	Immunohistochemistry on paraffin sections. <b>Heat Induced Epitope Retrieval (HIER):</b> Please follow the instructions for use in Novocastra Epitope Retrieval Solution pH 9. <b>Suggested dilution:</b> 1:100 for 30 minutes at 25 °C. This is provided as a guide and users should determine their own optimal working dilutions. <b>Visualization:</b> 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, <a href="http://www.LeicaBiosystems.com">www.LeicaBiosystems.com</a> <i>NB</i> In some cases, the peroxidase block step immediately following HIER may affect the staining achieved with this antibody. <u><a href="#">The performance of this antibody should be validated when utilized with other manual staining systems or automated platforms.</a></u> <b>Western Blotting:</b> Not recommended.
<b>Positive Controls</b>	Immunohistochemistry: tonsil.
<b>Staining Pattern</b>	Cytoplasmic.
<b>Storage and Stability</b>	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.
<b>Warnings and Precautions</b>	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 <a href="http://www.LeicaBiosystems.com">www.LeicaBiosystems.com</a>





**B I O S Y S T E M S**

### **General Overview**

CD68 antigen is a 110 kD intracellular glycoprotein primarily associated with cytoplasmic granules and to a lesser extent the membranes of macrophages, monocytes, neutrophils, basophils and large lymphocytes. The function of CD68 antigen is unknown but these lysosomal glycoproteins are the major components and may protect the membranes from attack by acid hydrolases. It is unclear if the surface associated CD68 antigen is functionally significant or due to leakage from the lysosomes. CD68 expression has been demonstrated in stimulated T cells and NK cells, nonhematopoietic tissues such as the liver and renal tubules. Clone 514H12 immunohistochemically stains macrophages in various tissues including Kupffer's cells and in the red pulp of the spleen, lamina propria of the gut, lung alveoli and bone marrow. This clone reacts with myeloid precursors and peripheral blood granulocytes and monocytes.

### **General References**

Gu M, Sohn KR, Kim DJ, et al. *Annals of Diagnostic Pathology*. 2007; 11:64-67.  
Da Costa CET, Annelis NE, Faaij CMJM, et al. *The Journal of Experimental Medicine*. 2005; 201(5):687-693.