

# Novocastra™ Lyophilized Mouse Monoclonal Antibody Perforin

## Product Code: NCL-PERFORIN

<b>Intended Use</b>	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
<b>Specificity</b>	Human perforin. Shows cross-reactivity with smooth muscle and differentiated epithelium.
<b>Clone</b>	5B10
<b>Ig Class</b>	IgG1
<b>Antigen Used for Immunizations</b>	Recombinant prokaryotic protein corresponding to an external region of the C-terminus of the perforin molecule.
<b>Hybridoma Partner</b>	Mouse myeloma (p3-NS1-Ag4-1).
<b>Preparation</b>	Lyophilized tissue culture supernatant containing sodium azide. Reconstitute with 1 mL or 0.1 mL of sterile distilled water as indicated on vial label.
<b>Effective on Frozen Tissue</b>	Not evaluated.
<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 6. <b>Suggested dilution:</b> 1:20 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> <u>The performance of this antibody should be validated when utilized with other manual staining systems or automated platforms.</u>
<b>Positive Controls</b>	Immunohistochemistry: Recommended positive control tissue is tonsil.
<b>Staining Pattern</b>	Granular cytoplasmic.
<b>Storage and Stability</b>	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.
<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**

Perforin is a pore-forming protein found in cytoplasmic granules of cytotoxic T-lymphocytes (CTLs). CTLs bind to cells which express foreign antigens and induce them to lyse. Perforin forms circular lesions on the target cell membrane similar to those induced by complement. Perforin and C9 share a high degree of homology particularly at the membrane spanning region. Perforin is constitutively expressed in human CD3 negative, CD56 positive NK cells, CD3 positive large granular lymphocytes and gamma/delta T cells. This expression is significantly induced in CD8 positive T cells but to a lesser extent in gamma/delta T cells and NK cells. The induction of perforin mRNA is partially blocked by the immunosuppressive drug cyclosporine A.

**General References**

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