Novocastra™ Lyophilized Mouse Monoclonal Antibody CD141 (Thrombomodulin)

BIOSYSTEMS

Product Code: NCL-CD141

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human thrombomodulin, also known as fetomodulin, endothelial anticoagulant protein, glycoprotein P112 and CD141.
Clone	15C8
Ig Class	IgG1
Antigen Used for Immunizations	Prokaryotic recombinant protein corresponding to the epidermal growth factor homology domain of the human CD141 molecule.
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	Yes. Acetone fixation recommended.
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 The performance of this antibody should be validated when utilized with other manual staining systems or automated platforms.
Positive Controls	Immunohistochemistry: Tonsil. Western Blotting: Not recommended.
Staining Pattern	Membrane.
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

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General Overview

Thrombomodulin is a transmembrane glycoprotein of 75 kD which can accelerate the activation of protein C. Activated protein C (APC) functions as an anticoagulant by combining with protein S to inactivate factors Va and VIIIa of the blood coagulation pathway and by binding thrombin. Several factors regulate thrombomodulin expression. Downregulation of thrombomodulin may be induced by the cytokine interleukin-1, tumor necrosis factor and endotoxin. Agents which increase cyclic AMP such as forskolin may upregulate thrombomodulin activity in endothelial cells. Thrombomodulin has been reported to be found in a number of normal tissues. These include the lining cells of arteries, veins, capillaries and the lymphatics as well as mesothelial cells, meningeal lining cells, synovial cells, syncytiotrophoblasts, megakaryocytes and platelets.

General References

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