

Novocastra™ Lyophilized Mouse Monoclonal Antibody Osteopontin

Product Code: NCL-O-PONTIN

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human osteopontin.
Clone	OP3N
Ig Class	IgG1
Antigen Used for Immunizations	Prokaryotic recombinant protein corresponding to a portion of the C-terminus of the osteopontin molecule.
Hybridoma Partner	Mouse myeloma (p3-NS1-Ag4-1).
Preparation	Lyophilized tissue culture supernatant containing sodium azide. Reconstitute with 1 mL or 0.1 mL of sterile distilled water as indicated on vial label.
Effective on Frozen Tissue	Not fully 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 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 <u>The performance of this antibody should be validated when utilized with other manual staining systems or automated platforms.</u>
Positive Controls	Immunohistochemistry: Gall bladder.
Staining Pattern	Cytoplasmic.
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 .



General Overview

Osteopontin is a 34 kD extracellular matrix protein with a cell binding domain. Other molecules which share this domain include fibronectin, vitronectin and a variety of other extracellular proteins that bind members of the integrin family of cell surface receptors. Osteopontin was originally identified as a major component of the non-collagenous organic bone matrix, however, it has subsequently been demonstrated in a wide range of normal adult tissues and body fluids. It is a multifunctional protein involved in bone mineralization, cell adhesion and cell migration. Other studies using in situ hybridization and immunohistochemistry have shown staining in the epithelium of gastrointestinal tract, gall bladder, pancreas, urinary and reproductive tracts, lung, salivary and sweat glands. Ganglion cells in the bowel also express osteopontin as do macrophages, T cells and NK cells upon activation.

General References

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