

## Novocastra™ Lyophilized Mouse Monoclonal Antibody Surfactant Protein A

## Product Code: NCL-SP-A

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human surfactant protein A (prosurfactant A).
Clone	32E12
lg Class	IgG2a, kappa
Antigen Used for Immunizations	Prokaryotic recombinant protein corresponding to the 104–246 amino acid region of the human prosurfactant A 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 evaluated.
Effective on Paraffin Wax Embedded Tissue	Yes.
Recommendations on Use	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> 1:2000 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 <sup>™</sup> 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: Lung.
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

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## BIOSYSTEMS

General Overview	Pulmonary surfactant plays a critical role in maintaining the structural integrity of the respiratory epithelium by reducing surface tension during expiration. It is a lipoprotein complex that is synthesised and secreted into the alveoli of the lung by type II pneumocytes. Lung surfactant protein-A (SP-A) is a major phospholipid-associated glycoprotein in surfactant and is a member of the C-type lectin superfamily that also inhibits lipid secretion and enhances the uptake of phospholipids by alveolar type II cells.
General References	<ul> <li>Shijubo N, Honda Y, Fujishima T, et al European Respiratory Journal. 8: 403–406 (1995).</li> <li>Kuroki Y, McCormack F X, Ogasawara Y, et al The Journal of Biological Chemistry. 269 (47): 29793–29800 (1994).</li> <li>Khoor A, Gray M E, Hull W M, et al The Journal of Histochemistry and Cytochemistry. 41 (9): 1311–1319 (1993).</li> <li>Hawgood S. American Journal of Physiology. (257). Lung Cellular and Molecular Physiology. 1: L13–L22 (1989).</li> <li>Tierney D F. American Journal of Physiology. (257). Lung Cellular and Molecular Physiology. 1: L14–L12 (1989).</li> <li>Phelps D S, Floros J and Taeusch Jr. H W. Biochemistry Journal. 237: 373–377 (1986).</li> <li>Weaver T E, Hull W M, Ross G, et al Biochimica et Biophysica Acta. 869: 330–336 (1986).</li> </ul>