



BMA BIOMEDICALS

Biotinylated Monoclonal Antibody To Rat SP-D

Surfactant Protein D

Surfactant protein D (SP-D) is a Ca^{2+} -dependent carbohydrate-binding protein and is structurally similar to other C-type mammalian lectins, such as conglutinin and SP-A. It has a molecular size of approximately 43kDa in its reduced state, 620kDa in non-dissociating conditions. SP-D enhances the production of oxygen radicals by rat alveolar macrophages and regulates some actions of SP-A, which is the most abundant surfactant protein. SP-D is synthesized and secreted by alveolar epithelial type II cells.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Product Number:	T-3203 (Lot 03PB0608)
Clone:	II E11
Host species, isotype:	Mouse IgG2b
Quantity:	200 μ g
Format:	Affinity purified, biotinylated, lyophilized. Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer, no preservative.
Stability:	Original vial: 1 year at 4° - 8°C from date of purchase. Stock solution or aliquots thereof: 1 year at -20°C. Avoid freeze-thaw cycles.
Applications:	Tested for immunohistochemistry (IHC); has been described to work in Western Blots. Approximate working dilution for IHC: Frozen sections: 1 μ g/ml (1:400) Paraffin sections: not tested Optimal dilutions should be determined by the end user. Suggested positive control: Rat lung. Please see www.bma.ch for protocols and general information.
Immunogen:	Purified rat surfactant protein D from bronchoalveolar lavage
Protein database:	rat-P35248
Antigen, epitope:	II E11 recognizes a conformational epitope of SP-D.

Antigen distribution: **Tissue sections:** alveolar type II cells, alveolar macrophages, two types of Clara cells SP-A+ and SP-A-, and extracellular deposits. Alveolar type III cells stain negative. No reaction on rat skin, colon, kidney and liver

Specificity: **Rat:** II E11 recognizes a conformational epitope of SP-D. No cross reactivity with rat SP-A.

Other species: human positive.

Selected references

M. KASPER, S. Albrecht, H. Grossmann, M. Grosser, D. Schuh, M. Müller:
Monoclonal Antibodies to Surfactant Protein D: Evaluation of Immunoreactivity in Normal Rat Lung and in a Radiation-Induced Fibrosis Model. Exp. Lung Res **21**:577-588 (1995)

For in vitro research only. This product contains no preservative.