
Monoclonal Antibody To Rat SP-D Surfactant Protein D

Surfactant protein D (SP-D) is a Ca²⁺-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.

Product Number:	T-3204 (Lot 03PO0412)
Clone:	VI F11
Host species, isotype:	Mouse IgG1, kappa light chain
Quantity:	200µg
Format:	Affinity purified, 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 and 0.09% sodium azide as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC); has been described to work in ELISA, Western Blots . Approximate working dilution for IHC: Frozen sections: 0.5µg/ml (1:800) for rat cryosections Paraffin sections: 10-20µg/ml (1:20-1:40); for rat paraffin or human frozen sections; microwave pretreatment for antigen retrieval is recommended 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 SP-D from bronchoalveolar lavage.
Antigen, epitope:	Surfactant Protein D, the epitope is localized in the lectin domain 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: SP-D.

Other species: human positive, pig negative

Selected references

M. KASPER, 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. Caution: this product contains sodium azide, a poisonous and hazardous substance.