
Biotinylated 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-3205 (Lot 02PB1103)
Clone:	VI F11
Host species, isotype:	Mouse IgG1, kappa light chain
Quantity:	200µg
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), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% thimerosal 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: 1µg/ml (1:400) for rat cryosections 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 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

Selected references

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Hilgendorff A, Schmidt R, Bohnert A, Merz C, Bein G, Gortner L.: Host defence lectins in preterm neonates. *Acta Paediatr.* 2005 Jun;94(6):794-9.

Griese M, Neumann M, von Bredow T, Schmidt R, Ratjen F.: Surfactant in children with malignancies, immunosuppression, fever and pulmonary infiltrates. *Eur Respir J.* 2002 Nov;20(5):1284-91.

Pan T, Nielsen LD, Allen MJ, Shannon KM, Shannon JM, Selman M, Mason RJ.: Serum SP-D is a marker of lung injury in rats. *Am J Physiol Lung Cell Mol Physiol.* 2002 Apr;282(4):L824-32.

Kasper M, Albrecht S, Grossmann H, Grosser M, Schuh D, Müller M.: Monoclonal antibodies to surfactant protein D: evaluation of immunoreactivity in normal rat lung and in a radiation-induced fibrosis model. *Exp Lung Res.* 1995 Jul-Aug;21(4):577-88.

For *in vitro* research only. Caution: this product contains thimerosal, a poisonous and hazardous substance.