



## Peninsula Laboratories, LLC

A Member of the Bachem Group

305 Old County Road, San Carlos, CA 94070

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### Monoclonal Antibody To Rat SP-D Surfactant Protein D

Surfactant protein D (SP-D) is a Ca<sup>2+</sup>-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.

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<b>Product Number:</b>	T-3204
<b>Clone:</b>	VI F11
<b>Host species, isotype:</b>	Mouse IgG1, kappa light chain
<b>Quantity:</b>	200µg
<b>Format:</b>	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.
<b>Stability:</b>	Original vial: 1 year at 4° - 8°C  Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
<b>Applications:</b>	Tested for immunohistochemistry (IHC); has been described to work in ELISA, Western Blots .  <b>Approximate working dilution for IHC:</b> 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. <b>Immunogen:</b> Purified SP-D from bronchoalveolar lavage.
<b>Antigen, epitope:</b>	Surfactant Protein D, the epitope is localized in the lectin domain of SP-D.
<b>Antigen distribution:</b>	<b>Tissue sections:</b> 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.
<b>Specificity:</b>	<b>Rat:</b> SP-D.  <b>Other species:</b> human positive



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### **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.