

**Anti-SP-D Antibody**  
Catalog # ABO12303

**Specification**

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**Anti-SP-D Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P35247</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Pulmonary surfactant-associated protein D(SFTPD) detection. Tested with WB, IHC-P, IHC-F, ICC, ELISA in Human;Mouse; Rat. <br>

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-SP-D Antibody - Additional Information**

**Gene ID** 6441

**Other Names**

Pulmonary surfactant-associated protein D, PSP-D, SP-D, Collectin-7, Lung surfactant protein D, SFTPD, COLEC7, PSPD, SFTP4

**Calculated MW**

37728 MW KDa

**Application Details**

ELISA , 0.1-0.5 µg/ml<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat<br>Immunohistochemistry(Frozen Section), 0.5-1 µg/ml<br>Immunocytochemistry, 0.5-1 µg/ml<br>Western blot, 0.1-0.5 µg/ml<br>

**Subcellular Localization**

Secreted, extracellular space, extracellular matrix. Secreted, extracellular space, surface film.

**Tissue Specificity**

Expressed in lung, brain, pancreas and adipose tissue (mainly mature adipocytes). .

**Protein Name**

Pulmonary surfactant-associated protein D

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Surfactant protein D (292-321aa RSAAENAALQQLVVAKNEAAFLSMTD SKTE), different from the related mouse and rat

sequences by eight amino acids.

#### **Purification**

Immunogen affinity purified.

#### **Cross Reactivity**

No cross reactivity with other proteins

#### **Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

#### **Sequence Similarities**

Belongs to the SFTPD family.

### **Anti-SP-D Antibody - Protein Information**

**Name** SFTPD

**Synonyms** COLEC7, PSPD, SFTP4

#### **Function**

Contributes to the lung's defense against inhaled microorganisms, organic antigens and toxins. Interacts with compounds such as bacterial lipopolysaccharides, oligosaccharides and fatty acids and modulates leukocyte action in immune response. May participate in the extracellular reorganization or turnover of pulmonary surfactant. Binds strongly maltose residues and to a lesser extent other alpha- glucosyl moieties.

#### **Cellular Location**

Secreted, extracellular space, extracellular matrix. Secreted, extracellular space, surface film

#### **Tissue Location**

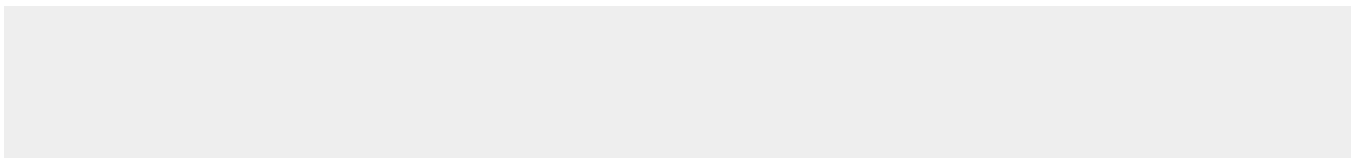
Expressed in lung, brain, pancreas and adipose tissue (mainly mature adipocytes).

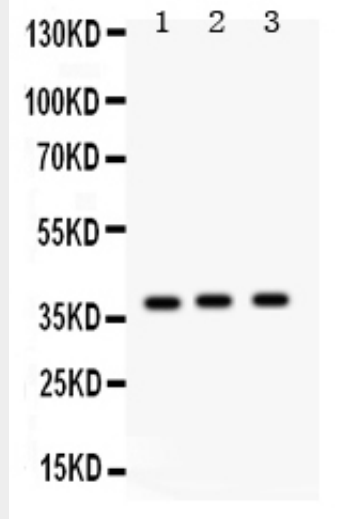
### **Anti-SP-D Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

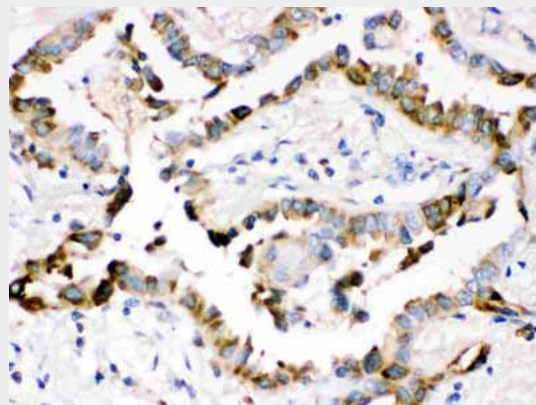
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Anti-SP-D Antibody - Images**





Anti- Surfactant protein D Picoband antibody, ABO12303, Western blotting All lanes: Anti Surfactant protein D (ABO12303) at 0.5ug/ml Lane 1: Rat Lung Tissue Lysate at 50ug Lane 2: Rat Brain Tissue Lysate at 50ug Lane 3: PANC Whole Cell Lysate at 40ug Predicted bind size: 38KDObserved bind size: 38KD



Anti- Surfactant protein D Picoband antibody, ABO12303, IHC(P) IHC(P): Human Lung Cancer Tissue



Figure 3. IHC analysis of Surfactant protein D using anti-Surfactant protein D antibody (ABO12303). Surfactant protein D was detected in immunocytochemical section of A549 cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 1/4g/ml rabbit anti-Surfactant protein D Antibody (ABO12303) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at

37Å°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

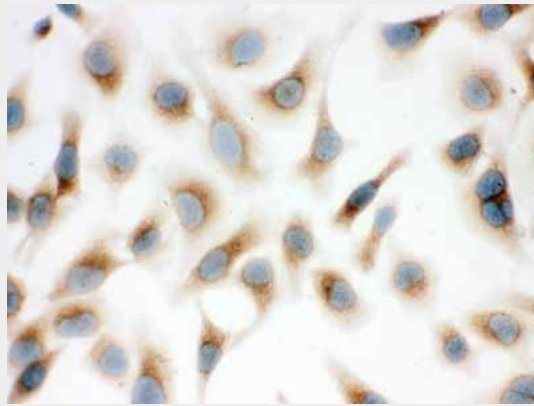


Figure 4. IHC analysis of Surfactant protein D using anti-Surfactant protein D antibody (ABO12303).Surfactant protein D was detected in immunocytochemical section of Hela cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1½g/ml rabbit anti-Surfactant protein D Antibody (ABO12303) overnight at 4Å°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Å°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

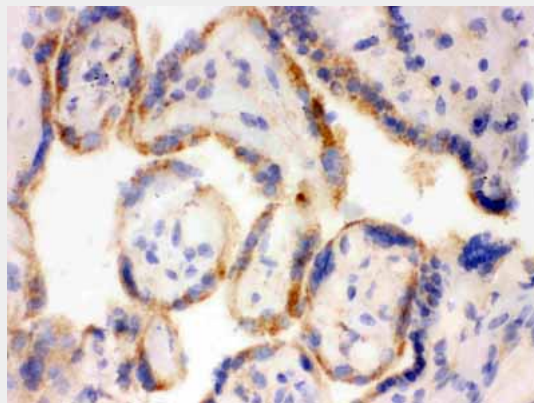


Figure 5. IHC analysis of Surfactant protein D using anti-Surfactant protein D antibody (ABO12303).Surfactant protein D was detected in frozen section of human placenta tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1½g/ml rabbit anti-Surfactant protein D Antibody (ABO12303) overnight at 4Å°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Å°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen. 5

#### **Anti-SP-D Antibody - Background**

Surfactant, pulmonary-associated protein D, also known as SFTPD or SP-D, is a protein which in humans is encoded by the SFTPD gene. It is mapped to 10q22.2-q23.1. The protein encoded by this gene is part of the innate immune response, protecting the lungs against inhaled microorganisms and chemicals. The encoded protein may also be involved in surfactant metabolism.