

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

Anti-SP-D Antibody - Product Information

Application	WB, IHC-P, IHC-F, ICC, E
Primary Accession	P35247
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.

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

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 Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Surfactant protein D (292-321aa RSAAENALQQLVVAKNEAFLSMTD 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

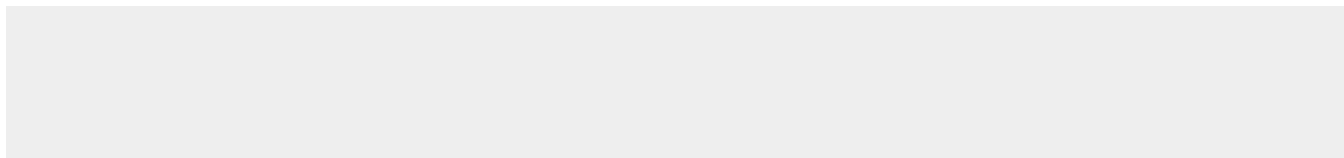
Tissue Location

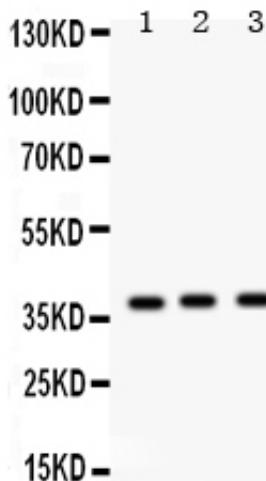
Expressed in lung, brain, pancreas and adipose tissue (mainly mature adipocytes).

Anti-SP-D Antibody - Protocols

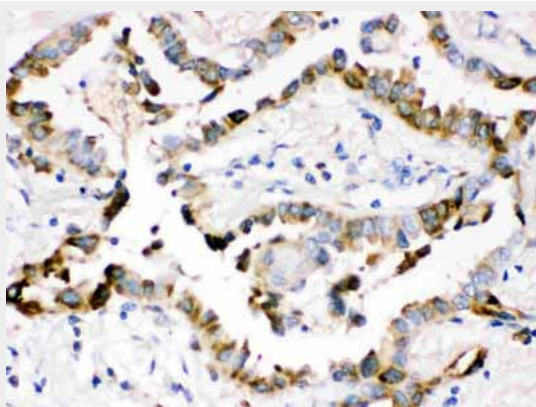
Provided below are standard protocols that you may find useful for product applications.

- [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: 38KD Observed 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 μ g/ml rabbit anti-Surfactant protein D Antibody (ABO12303) overnight at 4 $^{\circ}$ 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.

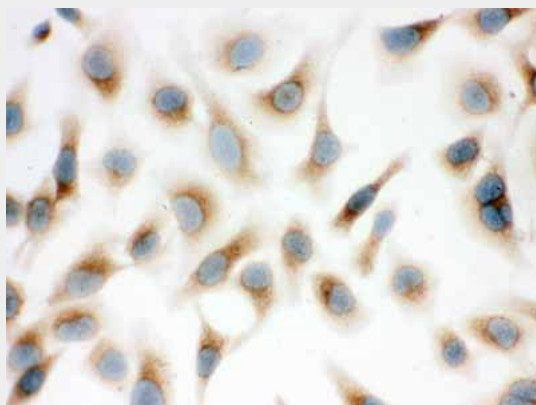


Figure 4. IHC analysis of Surfactant protein D using anti-Surfactant protein D antibody (ABO12303).Surfactant protein D was detected in immunocytochemical section of Hela cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section 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.

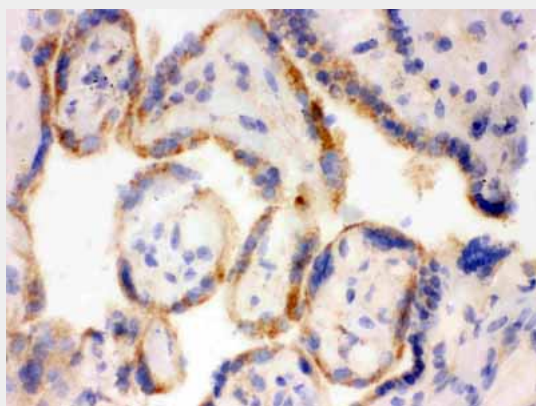


Figure 5. IHC analysis of Surfactant protein D using anti-Surfactant protein D antibody (ABO12303).Surfactant protein D was detected in frozen section of human placenta tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section 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.