

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 Lyophilized

Description

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 μ g/ml
br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, By Heat
br>Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml
br>Western blot, 0.1-0.5 μ g/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 Na2HPO4, 0.05mg NaN3.

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 r°Constitution, 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 SimilaritiesBelongs 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).

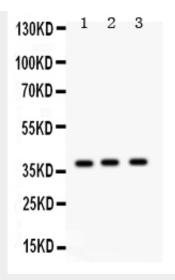
Anti-SP-D Antibody - Protocols

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

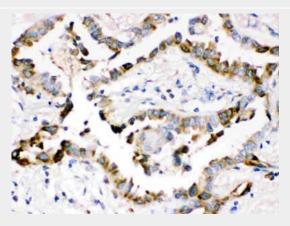
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-SP-D Antibody - Images





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



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

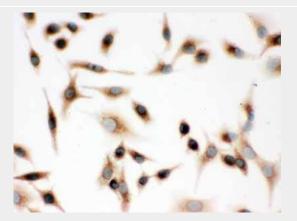


Figure 3. IHC analysis of Surfactant protein D using anti-Surfactant protein D antibody (ABO12303). Surfactant protein D was detected in immunocytochemical section of A549 cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 11^{14} g/ml rabbit anti-Surfactant protein D Antibody (ABO12303) overnight at 41^{14} c. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at



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

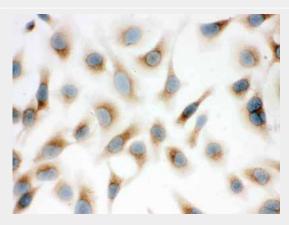


Figure 4. IHC analysis of Surfactant protein D using anti-Surfactant protein D antibody (ABO12303). Surfactant protein D was detected in immunocytochemical section of Hela cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 11^{1} /4g/ml rabbit anti-Surfactant protein D Antibody (ABO12303) overnight at 44° C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 374° C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

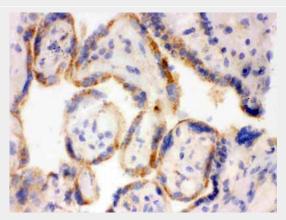


Figure 5. IHC analysis of Surfactant protein D using anti-Surfactant protein D antibody (ABO12303). Surfactant protein D was detected in frozen section of human placenta tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 11^{1} 4g/ml rabbit anti-Surfactant protein D Antibody (ABO12303) overnight at 44° C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 374° C. The tissue section was developed using Strepavidin-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.