

**Datasheet for 600-401-R06****SP-A Antibody****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Anti-SP-A (RABBIT) Antibody - 600-401-R06 |
| <b>Item No.:</b>     | 600-401-R06                               |
| <b>Size:</b>         | 100 µg                                    |
| <b>Applications:</b> | IHC, WB                                   |
| <b>Reactivity:</b>   | Mouse, Rat                                |
| <b>Host Species:</b> | Rabbit                                    |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Surfactant protein A is an innate immune system collectin. The gene encoding SP-A map to mouse chromosome 14. Surfactant protein-A, which plays a role in innate host defense in the lung, is also expressed in the Eustachian tube. We report that the frequency of specific surfactant protein-A haplotypes and genotypes differs between children with recurrent otitis media compared with a control population. This antibody is suitable for researchers interested in cancer research. |
| <b>Synonyms:</b>     | Pulmonary surfactant-associated protein A1, PSP-A, SP-A1, COLEC4, PSAP, SFTP1, SFTPA, SFTPA1B, 35 kDa pulmonary surfactant-associated protein, Alveolar proteinosis protein, Collectin-4                                                                                                                                                                                                                                                                                                      |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Target Details**

|                        |                                                                                                                                                                                               |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>      | Sftpa1                                                                                                                                                                                        |
| <b>Reactivity:</b>     | Mouse, Rat                                                                                                                                                                                    |
| <b>Immunogen Type:</b> | Conjugated Peptide                                                                                                                                                                            |
| <b>Immunogen:</b>      | SP-A affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a sequence at the C-terminal of mouse SP-A. |

**Purity/Specificity:** Anti-SP-A antibody is directed against mouse SP-A protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from mouse and rat based on 100% homology for the immunogen sequence. Cross reactivity with SP-A from other sources has not been determined.

**Relevant Links:**

- [UniProtKB - P35242](#)

## Application Details

**Tested Applications:** IHC, WB

**Application Note:** Anti-SP-A is tested for Immunohistochemistry-P and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~26.2 kDa corresponding to the appropriate cell lysate or extract.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**IHC:** 1:100-1:500

**WB:** 0.5µg/mL

## Formulation

**Physical State:** Lyophilized

**Concentration:** 0.5 mg/mL by UV absorbance at 280 nm

**Buffer:** 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>

**Preservative:** 0.05mg Thimerosal

**Stabilizer:** 5mg BSA

**Reconstitution Volume:** 100 µL

**Reconstitution Buffer:** Restore with deionized water (or equivalent)

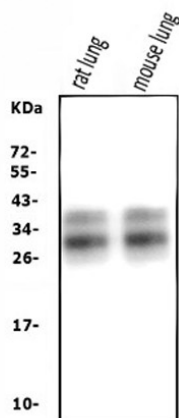
## Shipping & Handling

**Shipping Condition:** Ambient

**Storage Condition:** Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Expiration:** Expiration date is one (1) year from date of receipt.

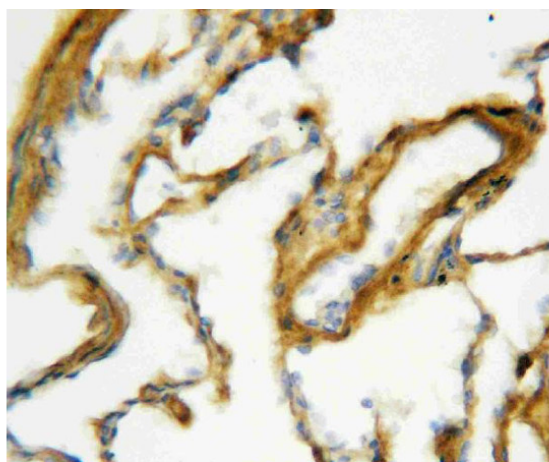
## Images



### Western Blot

Western blot analysis of SP-A/SFTPA1 using anti-SFTPA1 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30µg of sample under reducing conditions.

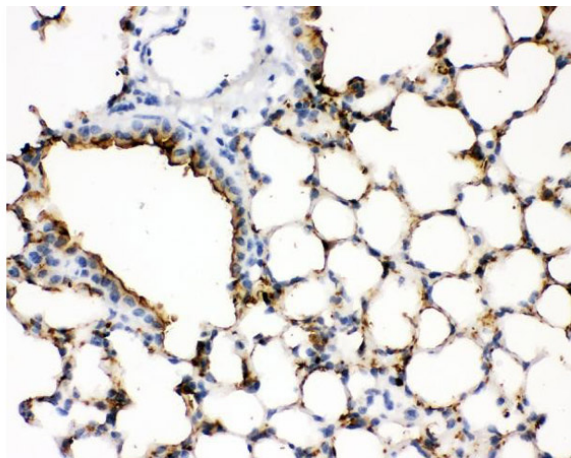
Lane 1: rat lung tissue lysates, Lane 2: mouse lung tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with affinity purified rabbit anti-SFTPA1 antigen polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SFTPA1 at approximately 26-35 kDa. The expected band size for SFTPA1 is at 26 kDa.



### Immunohistochemistry

Immunohistochemistry of analysis of SFTPA1 using anti-SFTPA1 antibody.

SFTPA1 was detected in paraffin-embedded section of rat lung tissues. 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 1µg/ml rabbit anti-SFTPA1 Antibody overnight at 4°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 Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



#### **Immunohistochemistry**

Immunohistochemistry of analysis of SFTP1 using anti-SFTP1 antibody. SFTP1 was detected in paraffin-embedded section of mouse lung tissues. 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 $\mu$ g/ml rabbit anti-SFTP1 Antibody overnight at 4°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 Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

#### **Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.