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SFTPC Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12333A

Specification

SFTPC Antibody (N-term) - Product Information

Application	**IF, WB, FC, IHC-P,E**
Primary Accession	P11686
Other Accession	P15783, NP_001165881.1, NP_003009.2
Reactivity	**Human, Mouse, Rat**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

SFTPC Antibody (N-term) - Additional Information

Gene ID 6440

Other Names
Pulmonary surfactant-associated protein C, SP-C, Pulmonary surfactant-associated proteolipid SPL(Val), SP5, SFTPC, SFTP2

Target/Specificity
This SFTPC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human SFTPC.

Dilution
IF~~1:25
WB~~1:2000
FC~~1:25
IHC-P~~1:200

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SFTPC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SFTPC Antibody (N-term) - Protein Information

Name SFTPC

Synonyms SFTP2

Function Pulmonary surfactant associated proteins promote alveolar stability by lowering the surface tension at the air-liquid interface in the peripheral air spaces.

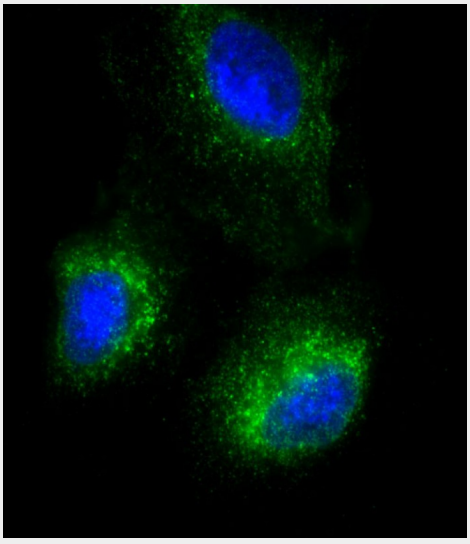
Cellular Location
Secreted, extracellular space, surface film.

SFTPC Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SFTPC Antibody (N-term) - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized A549 cells labeling SFTPC with AP12333A at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG (OH191631) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on A549 cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (1186255) at 1/500 dilution (red). The nuclear counter stain is DAPI (blue).

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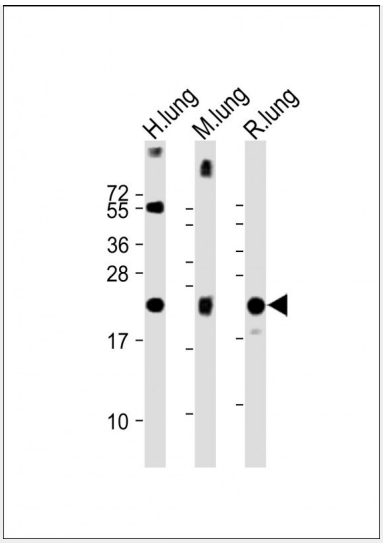
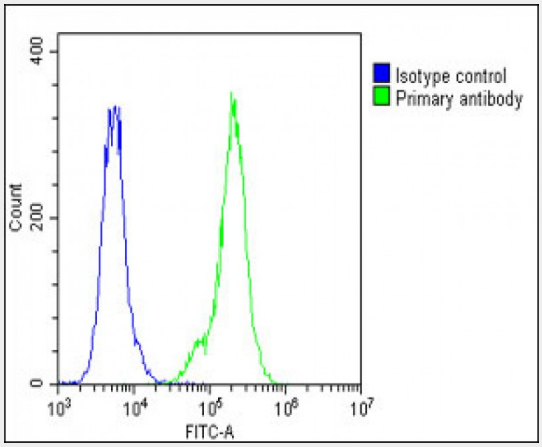
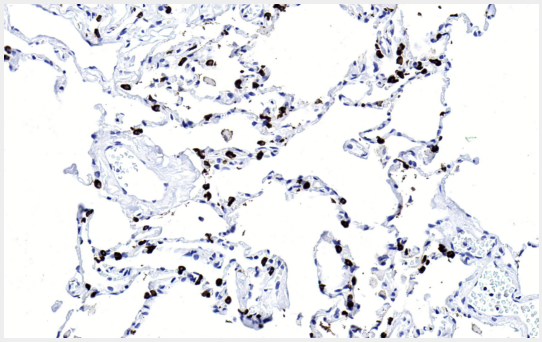


All lanes : Anti-SFTPC Antibody (N-term) at 1:2000 dilution Lane 1: Human lung lysate Lane 2: Mouse lung lysate Lane 3: Rat lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing A549 cells stained with AP12333A(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP12333A, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



Immunohistochemical analysis of paraffin-embedded Human lung section using SFTPC Antibody(Cat#AP12333a). AP12333a was diluted at 1:200 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

SFTPC Antibody (N-term) - Background

This gene encodes the pulmonary-associated surfactant protein C (SPC), an extremely hydrophobic surfactant protein essential for lung function and homeostasis after birth. Pulmonary surfactant is a surface-active lipoprotein complex composed of 90% lipids and 10% proteins which include plasma proteins and apolipoproteins SPA, SPB, SPC and SPD. The surfactant is secreted by the alveolar cells of the lung and maintains the stability of pulmonary tissue by reducing the surface tension of fluids that coat the lung. Multiple mutations in this gene have been identified, which cause pulmonary surfactant metabolism dysfunction type 2, also called pulmonary alveolar proteinosis due to surfactant protein C deficiency, and are associated with interstitial lung disease in older infants, children, and adults. Alternatively spliced transcript variants encoding different protein isoforms have been identified.

SFTPC Antibody (N-term) - References

Wambach, J.A., et al. Pediatr. Res. 68(3):216-220(2010)
Schuurhof, A., et al. Pediatr. Pulmonol. 45(6):608-613(2010)
Thouvenin, G., et al. Arch. Dis. Child. 95(6):449-454(2010)
Crossno, P.F., et al. Chest 137(4):969-973(2010)
Davila, S., et al. Genes Immun. 11(3):232-238(2010)

SFTPC Antibody (N-term) - Citations

- RAGE inhibition alleviates lipopolysaccharides-induced lung injury via directly suppressing autophagic apoptosis of type II alveolar epithelial cells