

### SFTPB Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16320c

### Specification

# SFTPB Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P07988</u> <u>NP\_000533.3</u>, <u>NP\_942140.2</u> Human Rabbit Polyclonal Rabbit IgG 42117 129-158

## SFTPB Antibody (Center) - Additional Information

#### Gene ID 6439

#### **Other Names**

Pulmonary surfactant-associated protein B, SP-B, 18 kDa pulmonary-surfactant protein, 6 kDa protein, Pulmonary surfactant-associated proteolipid SPL(Phe), SFTPB, SFTP3

#### Target/Specificity

This SFTPB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 129-158 amino acids from the Central region of human SFTPB.

Dilution WB~~1:1000

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**

SFTPB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### SFTPB Antibody (Center) - Protein Information

### Name SFTPB

Synonyms SFTP3



**Function** Pulmonary surfactant-associated proteins promote alveolar stability by lowering the surface tension at the air-liquid interface in the peripheral air spaces. SP-B increases the collapse pressure of palmitic acid to nearly 70 millinewtons per meter.

## **Cellular Location**

Secreted, extracellular space, surface film.

## SFTPB Antibody (Center) - Protocols

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

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

## SFTPB Antibody (Center) - Images



SFTPB Antibody (Center) (Cat. #AP16320c) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the SFTPB antibody detected the SFTPB protein (arrow).

# SFTPB Antibody (Center) - Background

SFTPB is the pulmonary-associated surfactant protein B (SPB), an amphipathic 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. The SPB enhances the rate of spreading and increases the stability of surfactant monolayers in vitro. Multiple mutations in this gene have been identified, which cause pulmonary surfactant metabolism dysfunction type 1, also called pulmonary alveolar proteinosis due to surfactant protein B deficiency, and are associated with fatal



respiratory distress in the neonatal period. Alternatively spliced transcript variants encoding the same protein have been identified.

### SFTPB Antibody (Center) - References

Baekvad-Hansen, M., et al. Eur. Respir. J. (2010) In press : Kim, W.J., et al. Eur. Respir. J. (2010) In press : Schuurhof, A., et al. Pediatr. Pulmonol. 45(6):608-613(2010) Cho, M.H., et al. Respir. Res. 11, 30 (2010) : Chaiworapongsa, T., et al. J. Matern. Fetal. Neonatal. Med. 21(9):663-670(2008)