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SFTPC Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12333A

Product Information

Application	WB, IF, FC, 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
Clone Names	RB31998
Calculated MW	21013
Antigen Region	1-30

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	WB~~1:1000 IF~~1:10~50 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

Protein Information

Name	SFTPC (HGNC:10802)
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.

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.

References

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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)

Citations

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