

Anti-Prosurfactant Protein B/SFTPB Antibody Picoband®

Catalog Number: A03441-1

About SFTPB

Pulmonary surfactant-associated protein B is a protein that in humans is encoded by the SFTPB gene. This gene encodes 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.

Overview

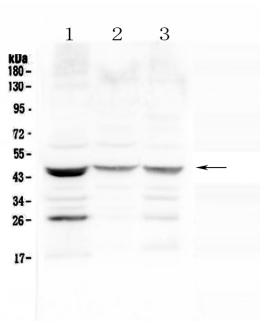
Product Name	Anti-Prosurfactant Protein B/SFTPB Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Prosurfactant Protein B/SFTPB Antibody Picoband® catalog # A03441-1. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P07988

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SFTPB, which shares 80% amino acid (aa) sequence identity with both mouse and rat SFTPB.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.

Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml

Anti-Prosurfactant Protein B/SFTPB Antibody Picoband® (A03441-1) Images



Western blot analysis of SFTPB using anti-SFTPB antibody (A03441-1). 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 50ug of sample under reducing conditions. Lane 1: human MCF-7 whole cell lysates, Lane 2: human COLO-320 whole cell lysates, Lane 3: human HepG2 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SFTPB antigen affinity purified polyclonal antibody (Catalog # A03441-1) at 0.5 ug/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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SFTPB at approximately 46KD. The expected band size for SFTPB is at 42KD.

1 Publications Citing This Product

1. PubMed ID: PMID:26097528, 3,4-dihydroxyphenylethanol suppresses irradiation-induced pulmonary fibrosis in adult rats

Visit bosterbio.com/anti-sftpb-picoband-trade-antibody-a03441-1-boster.html to see all 1 publications.

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