# SP-B Monoclonal Antibody

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| **Catalog No** | BYmab-04221 |
| **Isotype** | IgG |
| **Reactivity** | Human;Rat;Mouse; |
| **Applications** | WB |
| **Gene Name** | SFTPB |
| **Protein Name** | Pulmonary surfactant-associated protein B |
| **Immunogen** | The antiserum was produced against synthesized peptide derived from human SP-B. AA range:243-292 |
| **Specificity** | SP-B Monoclonal Antibody detects endogenous levels of SP-B protein. |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source** | Monoclonal, Mouse,IgG |
| **Purification** | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Dilution** | WB 1:500-2000 |
| **Concentration** | 1 mg/ml |
| **Purity** | ≥90% |
| **Storage Stability** | -20°C/1 year |
| **Synonyms** | SFTPB; SFTP3; Pulmonary surfactant-associated protein B; SP-B; 18 kDa pulmonary-surfactant protein; 6 kDa protein; Pulmonary surfactant-associated proteolipid SPL(Phe) |
| **Observed Band** | 42kD |
| **Cell Pathway** | Secreted, extracellular space, surface film. |
| **Tissue Specificity** | Brain,Lung, |
| **Function** | disease:Defects in SFTPB are the cause of pulmonary surfactant metabolism dysfunction type 1 (SMDP1) [MIM:265120]; also called pulmonary alveolar proteinosis due to surfactant protein B deficiency. Inborn errors of pulmonary surfactant metabolism are genetically heterogeneous disorders resulting in severe respiratory insufficiency or failure in full-term neonates or infants. These disorders are associated with various pathologic entities, including pulmonary alveolar proteinosis (PAP), desquamative interstitial pneumonitis (DIP), or cellular non-specific interstitial pneumonitis (NSIP).,function:Pulmonary surfactant-associated proteins promote alveolar stability by lowering the surface |

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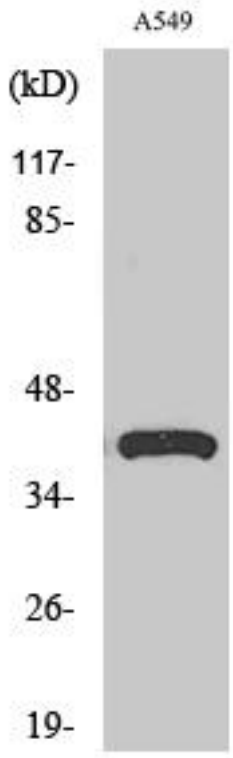
| | tension at the air-liquid interface in the peripheral air spaces. SP-B increases the collapse pressure of palmitic acid to nearly 70 millinewtons per meter.,miscellaneous:Pulmonary surfactant consists of 9 |
| **Background** | This gene encodes the pulmonary-associated surfactant protein B (SPB), 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 trans |
| **matters needing attention** | Avoid repeated freezing and thawing! |
| **Usage suggestions** | This product can be used in immunological reaction related experiments. For more information, please consult technical personnel. |

## Products Images




Western Blot analysis of various cells using SP-B Monoclonal Antibody