

Product datasheet for **AP26403PU-N**

SFTPB Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Immunohistochemistry on frozen sections: The typical starting working dilution is 1:50. Immunohistochemistry on paraffin sections: The typical starting working dilution is 1:50. Western blot: The typical starting working dilution is 1:50.
Reactivity:	Bovine, Human, Mouse, Porcine
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Human-based 60-amino acid synthetic SP-B polypeptide
Specificity:	This antibody detects SP-B. It recognizes proteins of 42, 25 and 18 kD under nonreducing conditions. The 18 kD form is reduced to 7.7-8 kD in the presence of beta-mercaptoethanol.
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin Preservative: 0.02% sodium azide
Concentration:	lot specific
Purification:	Protein A
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.
Gene Name:	surfactant protein B
Database Link:	Entrez Gene 6439 Human P07988



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Background:

There are four surfactant-specific proteins, designated surfactant protein A (SP-A), SP-B, SP-C and SP-D respectively. SP-A and SP-D are hydrophilic surfactant proteins and are members of the collectin family. SP-B and SP-C are hydrophobic surfactant proteins and may be the most appropriate indicators for the evolutionary origin of surfactant.

SP-B is synthesized by the alveolar type II epithelial cells as a 40-42 kD precursor that is subsequently proteolytically processed to 7.8-8 kD. SP-B enhances the spreading and stability of surfactant phospholipids in the alveolus. SP-B is essential for air-breathing in mammals and is therefore largely conserved. SP-B can interact with both phospholipid head groups and fatty chains and is particularly active in enhancing surface active behaviour in endogenous and exogenous lung surfactants. Even low SP-B contents had measurable effects in increasing the adsorption, dynamic surface tension lowering, and/or film respreading of DPPC, mixed synthetic lipids, and column-purified lung surfactant phospholipids. Deficiency of SP-B and other surfactant components is associated with respiratory distress syndrome (RDS) in premature infants and adults with respiratory distress syndrome (ARDS).

Synonyms:

Surfactant protein B, SP-B, SFTP3