

Product datasheet for **AP26363PU-N**

SFTPB Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	Immunoassays (coating and detection). Western blot: The typical starting working dilution is 1:50.
Reactivity:	Human, Porcine
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Pig SP-B from pig lungs which has been reconstituted in micelles of lysophosphatidylcholine
Specificity:	This antibody recognizes the surfactant protein B (SP-B). It recognizes under nonreducing conditions the most prominent forms of SP-B of 8 kD and 22 kD, corresponding to SP-B dimers.
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