

SP-D
Catalog # PVGS1546

Specification

SP-D - Product Information

Primary Accession [P35247](#)
Species
Human

Sequence
Ala21-Phe375

Purity
> 98% as analyzed by SDS-PAGE

Endotoxin Level
< 0.2 EU/ µg of protein by gel clotting method

Expression System
HEK 293

Formulation **Lyophilized from a 0.2 µm filtered solution in PBS.**

Reconstitution
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH₂O or PBS up to 100 µg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

SP-D - Additional Information

Gene ID 6441

Other Names
Pulmonary surfactant-associated protein D, PSP-D, SP-D, Collectin-7, Lung surfactant protein D, SFTPD, COLEC7, PSPD, SFTP4

Target Background
Surfactant protein D is a member of the collectin family of innate immune modulators. It is constitutively secreted by alveolar lining cells and epithelium associated with tubular structures, that contains a N-terminal collagen-like domain and a C-terminal lectin domain that are characteristic of members of the collectin family of proteins, and also shows calcium-dependent binding to specific saccharides. Besides it is involved in the development of acute and chronic inflammation of the lung. Several human lung diseases are characterized by decreased levels of bronchoalveolar SP-D.

SP-D - Protein Information

Name SFTPD

Synonyms COLEC7, PSPD, SFTP4

Function

Contributes to the lung's defense against inhaled microorganisms, organic antigens and toxins. Interacts with compounds such as bacterial lipopolysaccharides, oligosaccharides and fatty acids and modulates leukocyte action in immune response. May participate in the extracellular reorganization or turnover of pulmonary surfactant. Binds strongly maltose residues and to a lesser extent other alpha- glucosyl moieties.

Cellular Location

Secreted, extracellular space, extracellular matrix. Secreted, extracellular space, surface film

Tissue Location

Expressed in lung, brain, pancreas and adipose tissue (mainly mature adipocytes).

SP-D - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SP-D - Images