
Product Data Sheet

Product Name: SFTPD Human, Sf9
 Cat. No.: GP24567
 Batch No.: 1

Product Data

Purity	>98%	Source	Sf9, Baculovirus cells.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Surfactant Protein D; Lung Surfactant Protein D; Collectin-7; COLEC7; SFTPD; PSP-D; SP-D; Surfactant-Associated Protein; Pulmonary 4; Surfactant; Pulmonary-Associated Protein D; Pulmonary Surfactant-Associated Protein D; Pulmonary Surfactant Apoprotein; PSPD.		
Amino Acid Sequence	ADPEMKTYSH RTMPRACTLV MCSSVESGLP GRDGRDGREG PRGEKGD PGL PGAAGQAGMP GQAGPVGPKG DNGSVGEPGP KGDTGPSGPP GPPGVPGPAG REGPLGKQGN IGPOGKPGPK GEAGPKGEVG APGMQGSAGA RGLAGPKGER GVPGERGVPG NTGAAGSAGA GPQGSARGPPGLKGDGK IPGDKGAKGE SGLPDVASLR QQVEALQGQV QHLQAAFSQY KKVELFPNGQ SVGEKIFKTA GFVKPFTEAQ LLCTQAGGQL ASPRSAAENA ALQQLVVAKN EAAFLSMTDS KTEGKFTYPT GESLVYSNWA PGEPNDDGGS EDCVEIFTNG KWNDRACGEK RLVVCEFHHHHHH.		
Formulation	SFTPD protein solution (0.25mg/ml) contains 10% glycerol & Phosphate Buffered Saline (pH 7.4).		

Introduction

Surfactant pulmonary-associated protein D (SFTPD) belongs to the collectin family of C-type lectins, which is synthesized in many tissues including respiratory epithelial cells in the lung, and contains one C-type lectin domain and one collagen-like domain. SFTPD has humoral molecules of the innate immune system, and is deemed a functional candidate in chronic periodontitis. Moreover, SFTPD is involved in the development of acute and chronic inflammation of the lung. A number of human lung diseases are characterized by decreased levels of bronchoalveolar SFTPD. SFTPD contributes to the lungs defense against inhaled microorganisms, organic antigens and toxins. SFTPD interacts with complexes such as bacterial lipopolysaccharides, oligosaccharides and

Caution: Product has not been fully validated for medical applications. For research use only.

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fatty acids and modulates leukocyte action in immune response. In addition, SFTPD participates in the extracellular reorganization or turnover of pulmonary surfactant. SFTPD binds strongly maltose residues and to a lesser extent other alpha-glucosyl moieties.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

SFTPD produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 363 amino acids (22-375 a.a.) and having a molecular mass of 36.5kDa. (Molecular size on SDS-PAGE will appear at approximately 40-57kDa). SFTPD is expressed with a 9 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

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