
Product Data Sheet

Product Name: SFTPD Human
 Cat. No.: GP24566
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Surfactant Protein D; SFTP4; Surfactant Pulmonary-Associated Protein D; Lung Surfactant Protein D; Collectin-7; COLEC7; PSP-D; SP-D; Surfactant-Associated Protein Pulmonary 4; Pulmonary Surfactant-Associated Protein D; Pulmonary Surfactant Apoprotein; Collectin 7; PSPD; SFTPD.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MGSVASLRQQ VEALQGQVQH LQAAFSQYKK VELFPNGQSV GEKIFKTAGF VKPFTEAQLL CTQAGGQLAS PRSAAENAAL QQLVVAKNEA AFLSMTDSKT EGKFTYPTGE SLVYSNWAPG EPNDDGGSED CVEIFTNGKW NDRACGEKRL VVCEF.		
Formulation	SFTPD protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH8.0), 10% glycerol and 0.4M Urea.		

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 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.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

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 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 175 amino acids (224-375 a.a) and having a molecular mass of 18.9kDa. SFTPD is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA