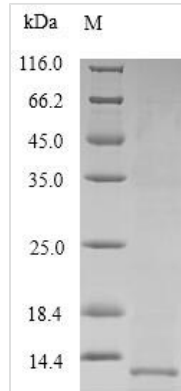




Recombinant Human Pulmonary surfactant-associated protein B (SFTPB)

Product Code	CSB-YP021173HU
Relevance	Pulmonary surfactant-associated proteins promote alveolar stability by lowering the surface tension at the air-liquid interface in the peripheral air spaces. SP-B increases the collapse pressure of palmitic acid to nearly 70 millinewtons per meter.
Abbreviation	Recombinant Human SFTPB protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P07988
Alias	18 kDa pulmonary-surfactant protein 6 kDa protein Pulmonary surfactant-associated proteolipid SPL(Phe)
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	FPIPLPYCWLRCRALIKRIQAMIPKGALAVAVAQVCRVVPLVAGGICQCLAERYS VILLDTLLGRMLPQLVCRLVLRCSM
Research Area	Cell Biology
Source	Yeast
Target Names	SFTPB
Protein Names	Recommended name: Pulmonary surfactant-associated protein B Short name= SP-B Alternative name(s): 18 kDa pulmonary-surfactant protein 6 kDa protein Pulmonary surfactant-associated proteolipid SPL(Phe)
Expression Region	201-279aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag-Free
Mol. Weight	8.7kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human SFTPb protein is encoded by the gene of SFTPb (201-279aa). The gene of SFTPb was cloned in a system (Yeast) that supported the expression of SFTPb. Modification of SFTPb by recombinant DNA technology could lead to the expression of the target protein. The purity is 90% determined by SDS-PAGE.

SFTPb is a protein coding gene that encodes Pulmonary surfactant-associated protein B. According to some studies, SFTPb may have the following features. The genetic relationship between lung surfactant protein genes SFTPA1, SFTPA2, SFTPb, SFTPC and SFTPD and cystic fibrosis. Mutations in the thyroid transcription factor gene NKX2-1 resulted in decreased expression of SFTPb and SFTPC. The pattern in the CA repeat-rich region of surfactant protein B (SFTPb) intron 4 has different effects on mRNA splicing. Analyze 40 cases of sporadic or familial neonatal and pediatric severe unexplained respiratory distress. The relationship with SFTPb. SFTPb gene lineage evolutionary event. Alu recombination-mediated deletion (ARMD), exonization and alternative splicing events. The upregulation of Sftpb induced by estrogen requires the transcriptional control of the neuroglutinin receptor ErbB4 in mouse lung type II epithelial cells.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.