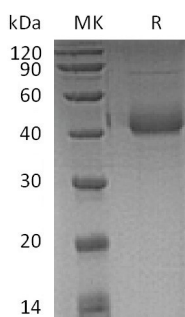


Summary

Name	SP-D/Pulmonary surfactant-associated protein D
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/ μ g as determined by LAL test.
Construction	Recombinant Human Pulmonary Surfactant-Associated Protein D is produced by our Mammalian expression system and the target gene encoding Ala21-Phe375 is expressed with a 6His tag at the C-terminus.
Accession #	AAH22318.1
Host	Human Cells
Species	Human
Predicted Molecular Mass	36.46 KDa
Formulation	Lyophilized from a 0.2 μ m filtered solution of 20mM PB, 150mM NaCl, pH 7.2.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at \leq -70°C, stable for 6 months after receipt. Store at \leq -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image



Background

Product Name: Recombinant Human SP-D (C-6His)
Catalog #: PHH1556



Alternative Names

Pulmonary Surfactant-Associated Protein D; PSP-D; SP-D; Collectin-7; Lung Surfactant Protein D; SFTPD; COLEC7; PSPD; SFTP4

Background

Surfactant Pulmonary-Associated Protein D (SP-D) is a 43 kDa member of the collectin family of innate immune modulators. Its principal components consist of a collagen-like region and a C-terminal carbohydrate recognition domain (CRD), a structure that places it in a subset of pattern recognition proteins termed defense collagens. SP-D is constitutively secreted by alveolar lining cells and epithelium associated with tubular structures and induced in cardiac smooth muscle and endothelial cells. It binds both secreted and transmembrane proteins that transduce its function. It binds human neutrophil defensins, modulating influenza anti-viral defense. It binds MD-2/LY96, a secreted protein that cooperates with Toll-like receptors (TLRs) in the response of macrophages to bacterial lipopolysaccharides (LPS) or cell wall components. It also binds macrophage CD14 and TLRs directly, blocking binding of LPS and down-regulating TNF- α secretion. SP-D binding of both SIRP α and the calreticulin/CD91 complex on macrophages allows for a graded response to environmental challenge.

Note

For Research Use Only , Not for Diagnostic Use.