

Recombinant Human Pulmonary Surfactant-Associated Protein D/PSP-D Protein(C-6His)

Cat.NO.: TP05477

3th Edition

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

Description: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-? secretion. SP-D binding of both SIRP? and the calreticulin/CD91 complex on macrophages allows for a graded response to environmental challenge.

Form:PBS

Molecular Weight: 36.5 kDa

Sequences: Ala21-Phe375(Glu22Gly)?

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.