



SP-D/Pulmonary surfactant-associated protein D

E21-541

Catalog Number:E21-541**Amount:**10ug**Altername:**Pulmonary Surfactant-Associated Protein D; PSP-D; SP-D; Collectin-7; Lung Surfactant Protein D; SFTPD; COLEC7; PSPD; SFTP4**Storage/Stability:**Lyophilized protein should be stored at < -20°C. Aliquots of reconstituted samples are stable at -20°C for 1 year.

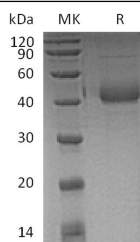
Background:Surfactant Pulmonary-Associated Protein D (SP-D) is a 43 kDa member of the collectin family of innate immune modulators. Its principal components consist of a collagen-like region and a C-terminal carbohydrate recognition domain (CRD), a structure that places it in a subset of pattern recognition 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.

Species:Human**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 ddH₂O.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin:Less than 0.1 ng/ μ g (1 IEU/ μ g) as determined by LAL test.**Purity:**Greater than 95% as determined by reducing SDS-PAGE.

Description:Recombinant Human Pulmonary Surfactant-Associated Protein D is produced by our Mammalian expression system and the target gene encoding Ala21-Phe375(Glu22Gly) is expressed with a 6His tag at the C-terminus.

Product State:Lyophilized**Ship Description:**The product is shipped at ambient temperature.**Formulation:**Lyophilized from a 0.2 μ m filtered solution of 20mM PB, 150mM NaCl, pH 7.2.**Expression system:**Human cells

Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

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