Recombinant Mouse SFTPD/SP-D Protein (His Tag)

Catalog Number: PKSM041282

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

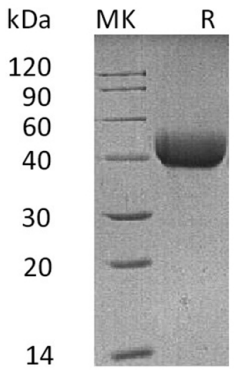
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse SFTPD/SP-D protein Ala20-Phe374, with an C-terminal His
Calculated MW	36.7 kDa
Observed MW	42 kDa
Accession	P50404
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM MES, 150mM NaCl, pH 7.4 . Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Background

Pulmonary surfactant-associated protein D (SP-D) is a 43 kDa member of the collectin family of innate immune modulators. Mouse SP-D cDNA encodes a 19 aa signal sequence and a 355 aa mature region with a 25 aa N-terminal linking-region, a 177 aa hydroxyproline and hydroxylysine collagen-like domain, a 46 aa coiled-coil segment, and a 106 aa, C-terminal collectin-like C-type lectin domain . SP-D is found in serum, plasma, broncho-alveolar lavage (BAL) fluid, and amniotic fluid. It also binds SIRP alpha and the calreticulin/CD91 complex on macrophages. SP-D contributes to the lun g's defense against inhaled microorganisms, organic antigens and toxins. It Interacts with compounds such as bacterial lipopolysaccharides, oligosaccharides and fatty acids and modulates leukocyte action in immune response. It may participate in the extracellular reorganization or turnover of pulmonary surfactant. It binds strongly maltose residues and to a lesser extent other alpha-glucosyl moieties.

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