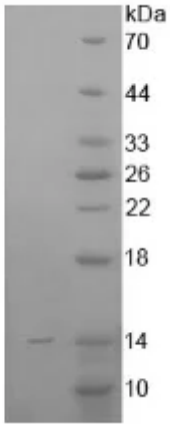
Active Surfactant Protein C (SP-C)

Catalog#:PEM12711

概述（Summary）

别称（Alternative Names）	SFTPC; PSP-C; SFTP2; SPC; SP5; Surfactant Associated Protein C; Pulmonary Surfactant Protein C; Pulmonary surfactant-associated proteolipid SPL(Val)
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Phe94-Ile193】
Accession #	P21841
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	12.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Pulmonary surfactant associated proteins promote alveolar stability by lowering the surface tension at the air-liquid interface in the peripheral air spaces.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

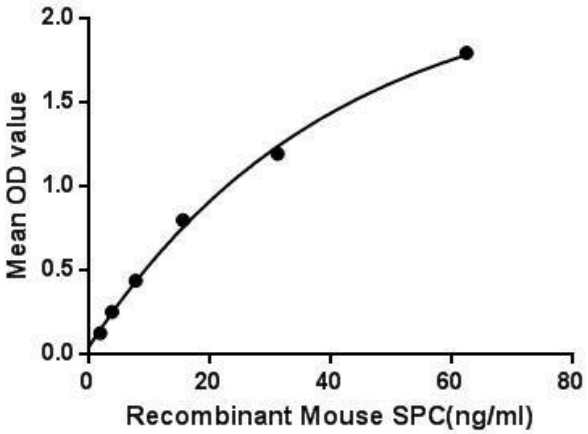


Figure. The binding activity of SPC with EIF2aK3. Surfactant associated proteins (SPC), is one of the pulmonary surfactant proteins. It is a membrane protein which manufactures surfactant. The propeptide of pulmonary surfactant C has an N-terminal alpha-helical segment whose suggested function was stabilization of the protein structure, since the latter can irreversibly transform from its native alpha-helical structure to beta-sheet aggregates and form amyloid fibrils. Besides, Eukaryotic Translation Initiation Factor 2 Alpha Kinase 3 (EIF2aK3) has been identified as an interactor of SPC, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse SPC and recombinant mouse EIF2aK3. Briefly, SPC were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to EIF2aK3-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-SPC pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of SPC and EIF2aK3 was shown in Figure 1, and this effect was in a dose dependent manner.

注意事项（Note）

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