

Surfactant Protein C Active Protein | SP-C active protein

Active Surfactant Protein C (SP-C)

CATALOG #
AAA150111

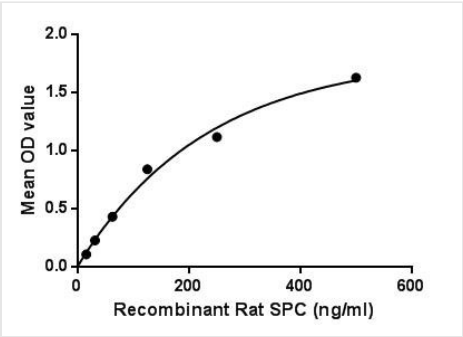
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

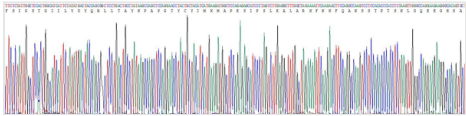
Surfactant Protein C; Active Surfactant Protein C (SP-C); SFTPC; PSP-C; SFTP2; SPC; SP5; Surfactant Associated Protein C; Pulmonary Surfactant Protein C; Pulmonary surfactant-associated proteolipid SPL(Val); SP-C active protein

PRODUCT SPECIFICATIONS

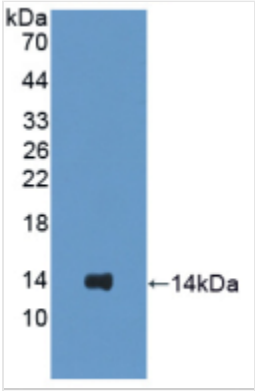
Purity/Purification	>95%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Phe95~Ile194
Sequence Length	194
Applicable Applications for SP-C active protein	Activity Assay, Cell Culture
Species	Rat
Tag	N-terminal His Tag
Isoelectric Point	6.6
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.



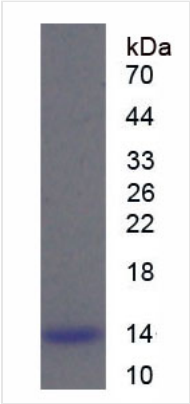
Gene Sequencing
Figure. Gene Sequencing (Extract



Bioactivity
Surfactant Associated Protein C (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, Monokine Induced By Interferon Gamma (Mlg) has been identified as an interactor of SPC, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat SPC and recombinant rat Mlg. Briefly, SPC were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100L were then transferred to Mlg-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 50uL stop solution to the wells and read at 450nm immediately. The binding activity of SPC and Mlg was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The binding activity of SPC with Mlg.



WB (Western Blot)
Figure. Western Blot



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for SP-C active protein	Tumor immunity; Infection immunity; Pulmonology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	62871620
NCBI GeneID	50683
UniProt Accession #	P11685
Molecular Weight	Predicted Molecular Mass: 12.1kDa Accurate Molecular Mass: 14kDa
NCBI Official Full Name	Surfactant protein C

NCBI Official Synonym Full Names	surfactant protein C
NCBI Official Symbol	Sftpc
NCBI Official Synonym Symbols	SP-C
NCBI Protein Information	pulmonary surfactant-associated protein C
UniProt Protein Name	Pulmonary surfactant-associated protein C
UniProt Gene Name	Sftpc
UniProt Synonym Gene Names	Sftp2; SP-C
UniProt Entry Name	PSPC_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/sp-c-active-protein/surfactant-protein-c/150111>