

Mouse SFTPC protein, His tag

Cat. No. GTX00326-pro

Application Functional Assay

Species Mouse

Package

10 µg

APPLICATION

Application Note

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 100 µl were then transferred to EIF2aK3-coated microtiter wells and incubated for 2h at 37°C. 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°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of SPC and EIF2aK3 was in a dose dependent manner.

Observed MW 14 kDa.

PROPERTIES

Form Lyophilized powder

Buffer Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.

Preservative ProClin 300

Storage For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.

Region/Sequence N-terminal His-Tag; Phe94~Ile193

Expression System E. coli

Purity > 97%

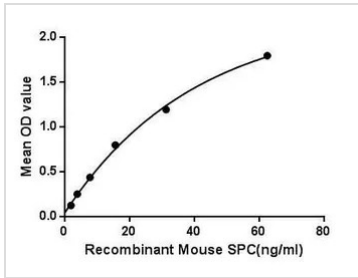
Endotoxin < 1 EU/µg

Conjugation Unconjugated

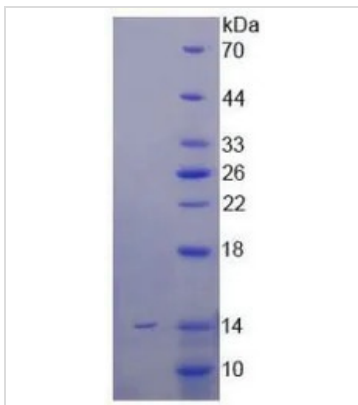
Note For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



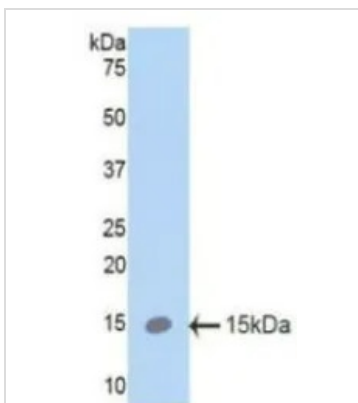
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DATA IMAGES

GTx00326-pro Functional Assay Image

Functional ELISA analysis of GTx00326-pro Mouse SFTPC protein which can bind immobilized EIF2aK3 protein.


GTx00326-pro Image

SDS-PAGE analysis of GTx00326-pro Mouse SFTPC protein.


GTx00326-pro Image

WB analysis of GTx00326-pro Mouse SFTPC protein.



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