Rat Pulmonary Surfactant-associated protein C (SP-C) ELISA Kit

Catalog No: #EK7348

Package Size: #EK7348-1 48T #EK7348-2 96T

Orders: order@signalwayantibody.com
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Description

Product Name	Rat Pulmonary Surfactant-associated protein C (SP-C) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	PSP-C; SFTP2; SMDP2; SP-C; pulmonary surfactant apoprotein-2 SP-C|surfactant; pulmonary-associated protein C
Accession No.	P22398
Uniprot	P22398
GeneID	100009162;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.117 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate SFTPC in samples. An antibody specific for SFTPC has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySFTPC present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SFTPC is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of SFTPC bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:SP-C is a fragment of a much larger precursor protein of 21 kD. The precursor contains an exceedingly hydrophobic region of 34 amino acids that comprises most of the mature SP C, and a unique poly-valine domain.Pulmonary surfactant-associated protein C is a membrane protein which manufactures surfactant.Humans and animals born lacking SP-C tend to develop progressive interstitial pneumonitis.The SFTPC gene encodes pulmonary-associated surfactant protein C (SPC), an extremely hydrophobic surfactant protein essential for lung function and homeostasis after birth. It is produced exclusively by type II alveolar epithelial cells in the lung. Pulmonary surfactant is a lipid-rich material that prevents lung collapse by lowering surface tension at the air-liquid interface in the alveoli of lung.

Note: This product is for in vitro research use only