

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



Catalog No: #EK7347

Orders: order@signalwayantibody.com

Package Size: #EK7347-1 48T #EK7347-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Rat Pulmonary Surfactant-associated protein D (SP-D) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	COLEC7; PSP-D; SFTP4; SP-D; collectin 7 pulmonary surfactant apoprotein pulmonary surfactant-associated protein D surfactant; pulmonary-associated protein D surfactant-associated protein; pulmonary
Accession No.	P35248
Uniprot	P35248
GeneID	25350;
Storage	<p>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.</p> <p>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).</p>

Application Details

Detect Range:7.81-500 pg/mL

Sensitivity:3.1 pg/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:Sandwich Test principle:This assay employs a two-site sandwich ELISA to quantitate SFTPD in samples. An antibody specific for SFTPD has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any SFTPD present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SFTPD 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 SFTPD bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:Surfactant protein D (SP-D) belongs to the collectin family. These proteins are oligomeric proteins composed of carbohydrate-recognition domains(CRD)attached to collagenous regions. Collectins are structurally similar to the ficolins although they make use of different CRD structures:C-type lectin domain for the collectins. The lung is the major site of synthesis of SP-D, where the molecules are produced and secreted onto the epithelial surface by alveolar type cells and unciliated bronchial epithelial cells. SP-D is also found in different epithelial cells of the gastrointestinal tract and in epithelial cells of various exocrine glands. SP-D is an important factor in the pulmonary anti-microbial defense. The anti-microbial defense mechanisms of SP-D are direct opsonization, neutralization and agglutination.

Note: This product is for in vitro research use only