# abcam

## Product datasheet

## Anti-Prosurfactant Protein C antibody [EPR19839-8] ab270521

יעלאעבע RabMAb

## 画像数6

#### 製品の概要

製品名 Anti-Prosurfactant Protein C antibody [EPR19839-8]

Rabbit monoclonal [EPR19839-8] to Prosurfactant Protein C 製品の詳細

由来種 Rabbit

アプリケーション 適用あり: IHC-P, WB, IHC-Fr, IP

種交差性 交差種: Mouse

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Mouse lung tissue lysate. IHC-P: Mouse lung tissue. IHC-Fr: Mouse lung tissue. IP: Mouse

lung tissue lysate.

This product is a recombinant monoclonal antibody, which offers several advantages including: 特記事項

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

## 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR19839-8

アイソタイプ ΙgG

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab270521の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).
IHC-Fr		1/100. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
IP		1/30.

#### ターゲット情報

#### 機能

#### 関連疾患

Pulmonary surfactant associated proteins promote alveolar stability by lowering the surface tension at the air-liquid interface in the peripheral air spaces.

Defects in SFTPC are the cause of pulmonary surfactant metabolism dysfunction type 2 (SMDP2) [MIM:610913]; also called pulmonary alveolar proteinosis due to surfactant protein C deficiency. A rare disease associated with progressive respiratory insufficiency and lung disease with a variable clinical course, due to impaired surfactant homeostasis. It is characterized by alveolar filling with floccular material that stains positive using the periodic acid-Schiff method and is derived from surfactant phospholipids and protein components. Excessive lipoproteins accumulation in the alveoli results in severe respiratory distress.

Genetic variations in SFTPC are a cause of susceptibility to respiratory distress syndrome in premature infants (RDS) [MIM:267450]; also known as RDS in prematurity. RDS is a lung disease affecting usually premature newborn infants. It is characterized by deficient gas exchange, diffuse atelectasis, high-permeability lung edema and fibrin-rich alveolar deposits called 'hyaline membranes'.

配列類似性 Contains 1 BRICHOS domain.

**細胞内局在** Secreted > extracellular space > surface film.

#### 画像



Western blot - Anti-Prosurfactant Protein C antibody [EPR19839-8] (ab270521)

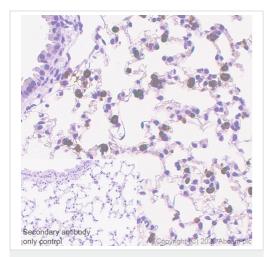
Anti-Prosurfactant Protein C antibody [EPR19839-8] (ab270521) at 1/1000 dilution + Mouse lung tissue lysate at 10  $\mu$ g

### Secondary

Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (<u>ab97051</u>) at 1/100000 dilution

**Predicted band size:** 21 kDa **Observed band size:** 21 kDa

Blocking and diluting buffer and concentration: This target has a precursor which contains an exceedingly hybrophobic region of 34 amino acids that comprises most of the mature Spftc, and a unique poly-valine domain. The staining pattern of our antibody is similar with published paper (PMID: 20378731 and PMID: 22461427). 15 seconds Exposure time:

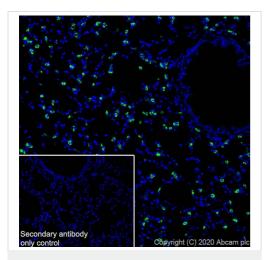


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prosurfactant Protein C antibody [EPR19839-8] (ab270521)

Immunohistochemical analysis of paraffin-embedded Mouse lung tissue labeling Prosurfactant Protein C with ab270521 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on Type II alveolar cells in mouse lung. The section was incubated with ab270521 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

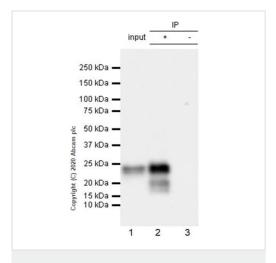


Immunohistochemistry (Frozen sections) - Anti-Prosurfactant Protein C antibody [EPR19839-8] (ab270521)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse lung tissue labeling Prosurfactant Protein C with ab270521 at 1/100 dilution followed by <a href="mailto:ab515077">ab150077</a> AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution (Green). Positive staining on mouse lung is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is <u>ab150077</u>
AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunoprecipitation - Anti-Prosurfactant Protein C antibody [EPR19839-8] (ab270521)

Prosurfactant Protein C was immunoprecipitated from 0.35 mg Mouse lung tissue lysate 1with ab270521 at 1/30 dilution. Western blot was performed on the immunoprecipitate using ab270521 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.

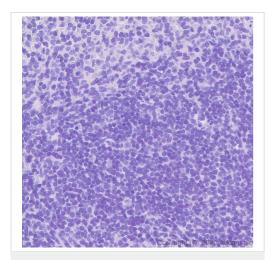
Lane 1: Mouse lung tissue lysate 10 ug.

Lane 2: ab270521 IP in Mouse lung tissue lysate.

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab270521 in mouse lung tissue lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 6 seconds.

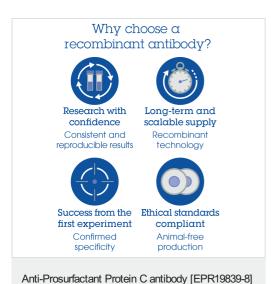


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prosurfactant Protein C antibody [EPR19839-8] (ab270521)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling Prosurfactant Protein C with ab270521 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). The Pulmonary surfactant-associated protein C is a peptide secreted by the alveolar type II pneumocytes of the lung (PMID: 16769199). Negative control: No staining on mouse spleen. The section was incubated with ab270521 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



(ab270521)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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