

## Product datasheet

# Anti-SP-C antibody [EPR19839] ab211326

Recombinant RabMAb

★★★★★ 2 Abreviews 1 References 5 Images

### Overview

<b>Product name</b>	Anti-SP-C antibody [EPR19839]
<b>Description</b>	Rabbit monoclonal [EPR19839] to SP-C
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-Fr, IP, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	<p><b>This product was produced with the following immunogens:</b></p> <p>Synthetic peptide within Mouse SP-C aa 50-150 (Cysteine residue). The exact sequence is proprietary. Database link: <a href="#">P21841</a></p> <p>Synthetic peptide within Mouse SP-C aa 100 to the C-terminus (Cysteine residue). The exact sequence is proprietary. Database link: <a href="#">P21841</a></p>
<b>Positive control</b>	WB: Mouse lung lysate. IHC-P: Mouse lung tissue. IHC-Fr: Mouse lung tissue. IP: Mouse lung lysate.
<b>General notes</b>	<p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>This product is a <a href="#">recombinant rabbit monoclonal antibody</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR19839

Isotype

IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab211326** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).
IHC-Fr	★★★★★	1/500. Antigen retrieval: Heated citrate solution (10mM citrate PH 6.0 + 0.05% Tween-20).
IP		1/40.
IHC-P	★★★★★	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

## Target

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### Function

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

### Involvement in disease

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'.

### Sequence similarities

Contains 1 BRICHOS domain.

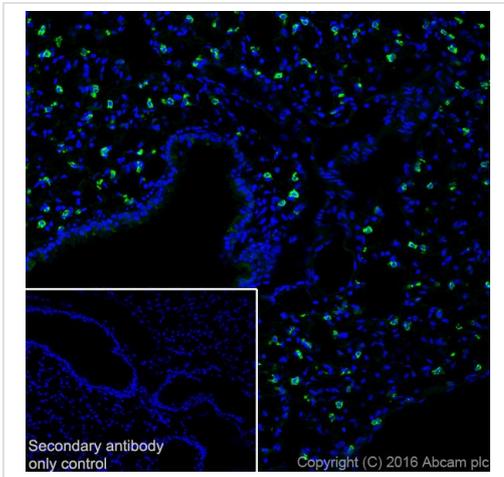
### Cellular localization

Secreted > extracellular space > surface film.

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## Images

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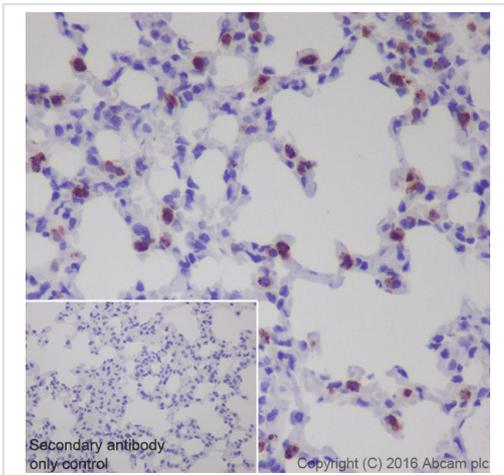
Immunohistochemistry (Frozen sections) - Anti-SP-C antibody [EPR19839] (ab211326)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse lung tissue labeling SP-C with ab211326 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Cytoplasmic staining on alveolar type II cells of mouse lung is observed [PMID: 23967208].

The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor<sup>®</sup> 488) (ab150077) at 1/1000 dilution.



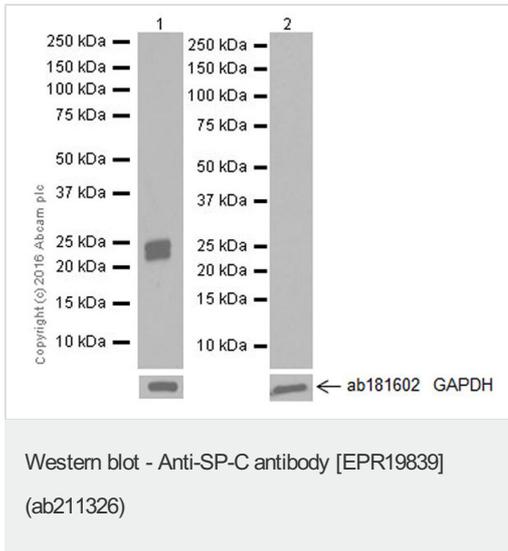
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SP-C antibody [EPR19839] (ab211326)

Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling SP-C with ab211326 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on alveolar type II cells of mouse lung is observed [PMID: 15186480].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.



**All lanes** : Anti-SP-C antibody [EPR19839] (ab211326) at 1/1000 dilution

**Lane 1** : Mouse lung lysate

**Lane 2** : Mouse spleen lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size:** 21 kDa

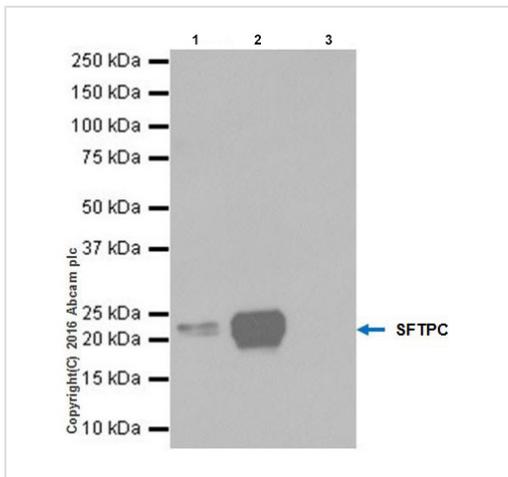
**Observed band size:** 21 kDa

**Exposure time:** 5 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

The banding pattern in Lane 1 represents pro- and mature forms of SP-C.

**Negative control:** mouse spleen. [PMID: 15186480].



Immunoprecipitation - Anti-SP-C antibody  
[EPR19839] (ab211326)

SP-C was immunoprecipitated from 0.35 mg of mouse lung lysate with ab211326 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab211326 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution.

Lane 1: Mouse lung lysate, 10ug (Input).

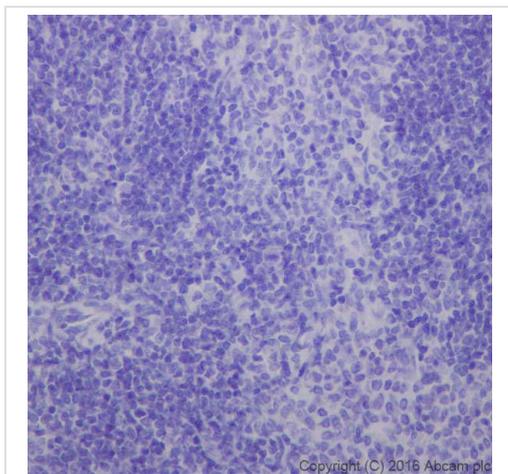
Lane 2: ab211326 IP in mouse lung lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab211326 in mouse lung lysate.

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

Exposure time: 5 seconds.

The banding pattern represents pro- and mature forms of SFTPC.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SP-C antibody  
[EPR19839] (ab211326)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling SP-C with ab211326 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

**Negative control:** no staining on mouse spleen. [PMID: 15186480]. Counter stained with Hematoxylin.

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

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