# abcam

# Product datasheet

# Anti-Prosurfactant Protein C antibody ab90716

★★★★★ 11 Abreviews 70 References 画像数 5

製品の概要

製品名 Anti-Prosurfactant Protein C antibody

製品の詳細 Rabbit polyclonal to Prosurfactant Protein C

由来種 Rabbit

特異性 From Mar 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help. You may also be interested in our

alternative recombinant antibody, ab211326.

アプリケーション 適用あり: IHC-P, ICC/IF, WB, IP

種交差性 交差種: Mouse, Human

交差が予測される動物種: Rhesus monkey 🔷

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 IHC-P: Normal human lung. ICC/IF: A549 cells. IP: Mouse Lung tissue. WB: Mouse and human

Lung Tissue Lysate.

**特記事項**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

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 or -

80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

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Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ IgG

#### アプリケーション

**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ab90716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	<b>★★★★★ (4)</b>	Use a concentration of 1 µg/ml.
ICC/IF	*** <u>*</u> (2)	Use a concentration of 1 µg/ml.
WB	<b>★★★</b> ☆☆ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 25 kDa (predicted molecular weight: 21 kDa).
IP		Use a concentration of 5 µg/ml.

#### ターゲット情報

機能 Pulmonary surfactant associated proteins promote alveolar stability by lowering the surface

tension at the air-liquid interface in the peripheral air spaces.

関連疾患 Defects in SFTPC are the cause of pulmonary surfactant metabolism dysfunction type

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.

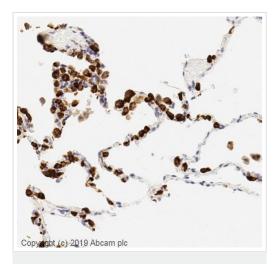
Genetic variations in SFTPC are a cause of susceptibility to respiratory distress syndrome in premature infants (RDS) [MIM:267450]; also known as RDS in prematurity. RDS is a lung disease affecting usually premature newborn infants. It is characterized by deficient gas exchange, diffuse atelectasis, 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

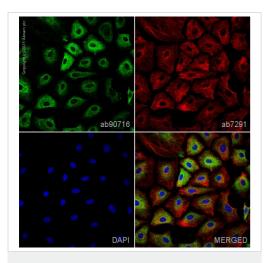
2



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prosurfactant Protein C antibody (ab90716)

IHC image of Prosurfactant Protein C staining in a section of formalin-fixed paraffin-embedded normal human lung performed on a Leica BOND<sup>TM</sup> system using the standard protocol **F**. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab90716, 1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

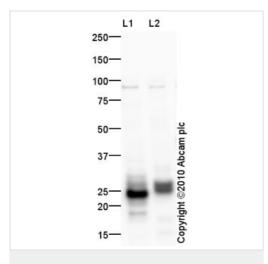


Immunocytochemistry/ Immunofluorescence - Anti-Prosurfactant Protein C antibody (ab90716)

ab90716 staining Prosurfactant Protein C in A549 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab90716 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor® 488), preadsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a high-content analyser (Operetta CLS,
Perkin Elmer) and a maximum intensity projection of confocal
sections is shown.



Western blot - Anti-Prosurfactant Protein C antibody (ab90716)

All lanes : Anti-Prosurfactant Protein C antibody (ab90716) at 1  $\mu g/ml$ 

Lane 1 : Lung (Human) Tissue Lysate
Lane 2 : Lung (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

# **Secondary**

All lanes: Goat Anti-Rabbit lgG H&L (HRP) preadsorbed

(ab97080) at 1/5000 dilution

Developed using the ECL technique.

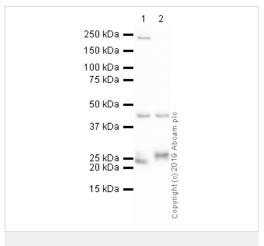
Performed under reducing conditions.

**Predicted band size:** 21 kDa **Observed band size:** 25,28 kDa

Additional bands at: 90 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 3 minutes



Western blot - Anti-Prosurfactant Protein C antibody (ab90716)

**All lanes :** Anti-Prosurfactant Protein C antibody (ab90716) at 1  $\mu$ g/ml

Lane 1: Lung (Human) Tissue Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 21 kDa **Observed band size:** 25,28 kDa

Additional bands at: 45 kDa (possible non-specific binding)

Exposure time: 2 minutes

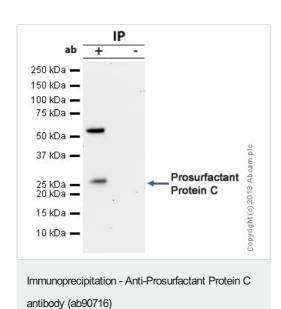
Prosurfactant Protein C was immunoprecipitated using 0.5mg Mouse Lung tissue, 5µg of Rabbit polyclonal to Prosurfactant Protein C and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, Mouse Lung tissue lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of  $40\mu$ I SDS loading buffer and incubated for 10min at 70°C;  $10\mu$ I of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab90716.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (ab99697).

Band: 23kDa; Prosurfactant Protein C



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