

Product datasheet

Anti-Surfactant protein D/SP-D antibody [EPR21928-209] ab220423

Recombinant RabMAb

6 Images

Overview

Product name	Anti-Surfactant protein D/SP-D antibody [EPR21928-209]
Description	Rabbit monoclonal [EPR21928-209] to Surfactant protein D/SP-D
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human Surfactant protein D/SP-D aa 1 to the C-terminus. The exact sequence is proprietary. Database link: P35247
Positive control	WB: Human Surfactant protein D/SP-D recombinant protein (aa 21-375); Human lung lysate. IHC-P: Human lung and skeletal muscle tissue. IP: Human fetal lung lysate.
General notes	<p>Previously labelled as Surfactant protein D.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p>

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21928-209
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab220423** 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 43 kDa (predicted molecular weight: 38 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.

Target

Function	Contributes to the lung's defense against inhaled microorganisms. May participate in the extracellular reorganization or turnover of pulmonary surfactant. Binds strongly maltose residues and to a lesser extent other alpha-glucosyl moieties.
Sequence similarities	Belongs to the SFTPD family. Contains 1 C-type lectin domain. Contains 1 collagen-like domain.
Post-translational	The N-terminus is blocked.

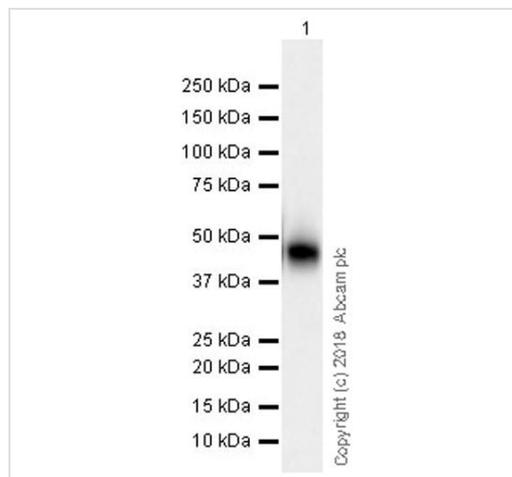
modifications

Hydroxylation on proline residues within the sequence motif, GXPG, is most likely to be 4-hydroxy as this fits the requirement for 4-hydroxylation in vertebrates.

Cellular localization

Secreted > extracellular space > extracellular matrix. Secreted > extracellular space > surface film.

Images



Western blot - Anti-Surfactant protein D/SP-D antibody [EPR21928-209] (ab220423)

Anti-Surfactant protein D/SP-D antibody [EPR21928-209] (ab220423) at 1/1000 dilution + Human lung lysate at 20 μ g

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Developed using the ECL technique.

Predicted band size: 38 kDa

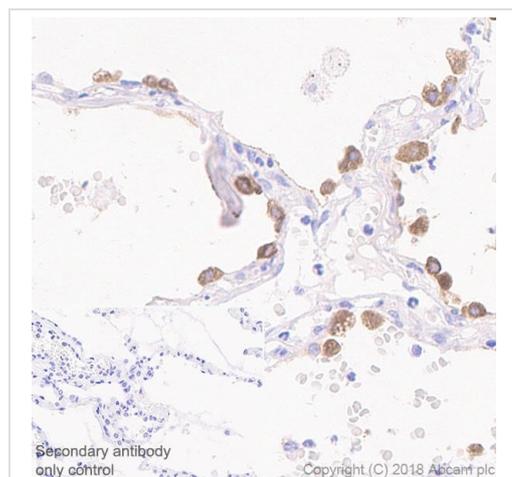
Observed band size: 43 kDa

[why is the actual band size different from the predicted?](#)

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

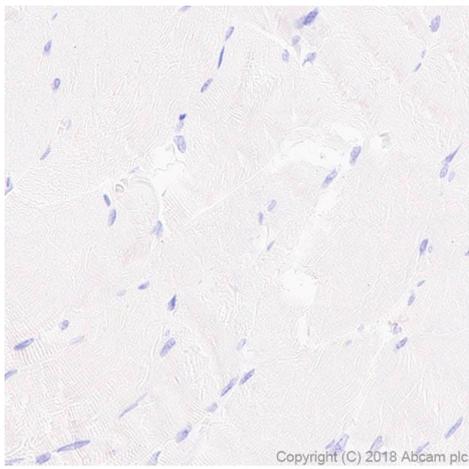
The molecular mass observed is consistent with what has been described in the literature (PMID: 9751757).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Surfactant protein D/SP-D antibody [EPR21928-209] (ab220423)

Immunohistochemical analysis of paraffin-embedded human lung tissue labeling Surfactant protein D/SP-D with ab220423 at 1/500 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Cytoplasmic staining on alveolar type II cells of human lung (PMID: 10820266) is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

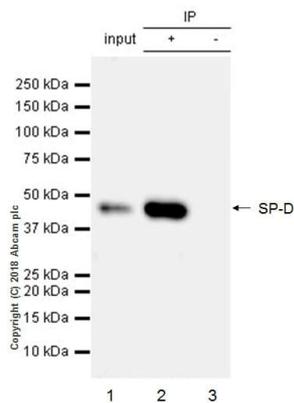


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Surfactant protein D/SP-D antibody [EPR21928-209] (ab220423)

Negative control: No staining on human skeletal muscle (PMID: 10640760) is observed

Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue labeling Surfactant protein D/SP-D with ab220423 at 1/5000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Immunoprecipitation - Anti-Surfactant protein D/SP-D antibody [EPR21928-209] (ab220423)

Surfactant protein D/SP-D was immunoprecipitated from 0.35 mg human fetal lung lysate with ab220423 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab220423 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/5000 dilution.

Lane 1: Human fetal lung lysate 10 μ g (Input).

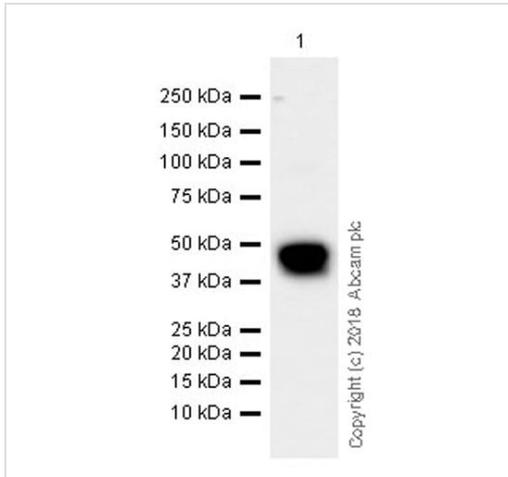
Lane 2: ab220423 IP in human fetal lung lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab220423 in human fetal lung lysate.

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

Exposure time: 3 minutes.

The molecular mass observed is consistent with what has been described in the literature (PMID: 9751757).



Western blot - Anti-Surfactant protein D/SP-D antibody [EPR21928-209] (ab220423)

Anti-Surfactant protein D/SP-D antibody [EPR21928-209] (ab220423) at 1/1000 dilution + Human Surfactant protein D/SP-D recombinant protein (aa 21-375), 10 ng

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 38 kDa

Exposure time: 32 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

Recombinant protein was obtained from a mammalian expression system.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Surfactant protein D/SP-D antibody [EPR21928-209] (ab220423)

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

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