abcam

ab307666

Anti-Uteroglobin antibody [EPR27144-86]

Recombinant | RabMAb | Advanced Validation | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR27144-86
Purification technique	Affinity purification Protein A
Concentration	0.4515 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

mIHC

Tested

Species	Human
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Transfected cell line - Human, Rat, Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Transfected cell line - Human
Dilution info	1/500
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Rat, Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Transfected cell line - Human
Dilution info	1/1000
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Rat, Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Transfected cell line - Human
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

IP

Not recommended

Species	Mouse, Human, Transfected cell line - Human, Rat
Dilution info	-
Notes	-

WB

Not recommended

Species	Rat, Mouse, Human, Transfected cell line - Human
Dilution info	-
Notes	-

Target data

See full target information SCGB1A1

Function	Binds phosphatidylcholine, phosphatidylinositol, polychlorinated biphenyls (PCB) and weakly progesterone, potent inhibitor of phospholipase A2.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Uteroglobin also known as Clara cell secretory protein (CC16) is a small secreted protein with a molecular mass of approximately 16 kDa. Expressed chiefly in the respiratory epithelium of the lungs particularly by Clara cells it is also present in other tissues such as the kidney and uterus. Uteroglobin acts as an anti-inflammatory and immunomodulatory protein playing an important role in protecting epithelial cells from damage by various harmful agents.
Biological function summary	Uteroglobin serves as a multifunctional secretory agent contributing to the regulation of inflammation and tissue remodeling. It does not form part of a larger complex but acts independently. By binding and inhibiting pro-inflammatory mediators like phospholipase A2 Uteroglobin reduces the production of arachidonic acid derivatives which are involved in inflammatory processes. Additionally it acts as a chemoattractant for certain immune cells further modulating immune responses.
Pathways	Uteroglobin integrates into the immune response and inflammation pathways. It indirectly interacts with proteins such as cytokines and chemokines influencing pathways like the arachidonic acid metabolism pathway and the leukocyte extravasation signaling pathway. These interactions reduce inflammatory response and regulate immune cell movement demonstrating its anti-inflammatory function.
Associated diseases and disorders	Low levels of Uteroglobin have been associated with respiratory conditions such as asthma and chronic obstructive pulmonary disease (COPD). By affecting inflammation pathways Uteroglobin interacts with inflammatory cytokines which exacerbate these conditions. Additionally its connection to proteins involved in these pathways makes it a potential biomarker for assessing lung injury and monitoring disease progression.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

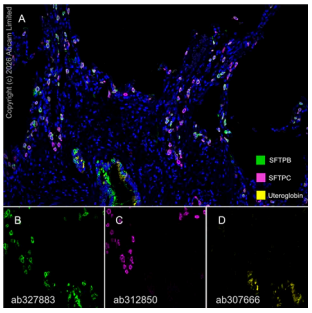
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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9 product images



Multiplex immunohistochemistry - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

Uteroglobin Multiplex immunohistochemistry staining of Human lung using rabbit Anti-Uteroglobin antibody

Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded human lung tissue staining Pro-surfactant Protein B with ab327883 at a 1:1000 (0.504 µg/ml) dilution, ab312850 anti-SFTPC used at 1:2000 (0.25 µg/ml) dilution and ab307666 anti-Uteroglobin used at a 1:2000 (0.24 µg/ml) dilution.

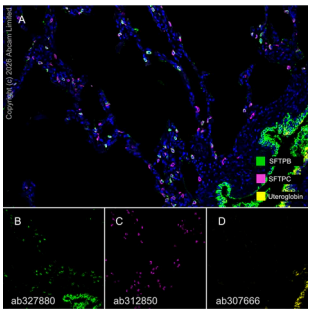
Panel A: merged staining of anti-SFTPB (green; Opal™570), anti-SFTPC (magenta; Opal™690) and anti-Uteroglobin (yellow; Opal™520) on human lung.
Panel B: anti-SFTPB staining alveolar type II cells in human lung.
Panel C: ant-SFTPC staining alveolar type II cells in human lung.
Panel D: ant-Uteroglobin staining club cells in human lung.
Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab327883, ab312850 and ab307666 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Nuclear counter stain with DAPI.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Multiplex immunohistochemistry - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

Uteroglobin Multiplex immunohistochemistry staining of Human lung using rabbit Anti-Uteroglobin antibody

Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded human lung tissue staining Pro-surfactant Protein B (Pre-pro and C-terminal pro) with ab327880 at a 1:1000 (0.512 µg/ml) dilution, ab312850 anti-SFTPC used at 1:2000 (0.25 µg/ml) dilution and ab307666 anti-Uteroglobin used at a 1:2000 (0.24 µg/ml) dilution.

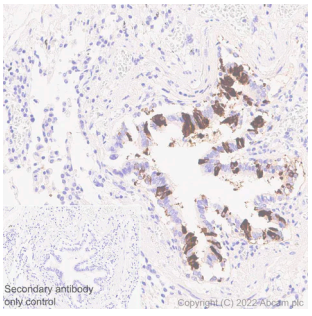
Panel A: merged staining of anti-SFTPB (green; Opal™570), anti-SFTPC (magenta; Opal™690) and anti-Uteroglobin (yellow; Opal™520) on human lung.
Panel B: anti-SFTPB staining alveolar type II cells in human lung.
Panel C: ant-SFTPC staining alveolar type II cells in human lung.
Panel D: ant-Uteroglobin staining club cells in human lung.
Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab327880, ab312850 and ab307666 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

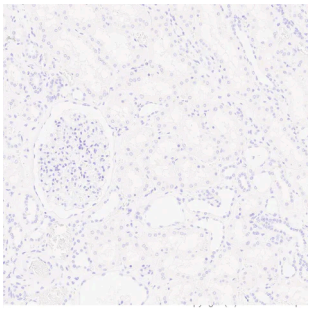
Nuclear counter stain with DAPI.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



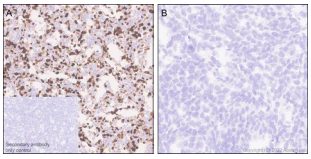
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling LAGE-1 with ab307732 at 1/2000 (0.245 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human testis (PMID: 10399963). The section was incubated with ab307732 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 LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



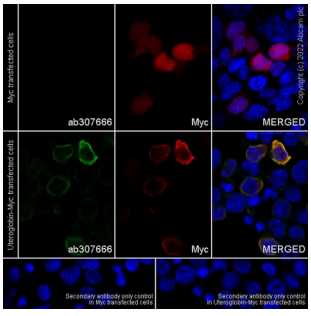
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling LAGE-1 with ab307732 at 1/2000 (0.245 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Negative control: no staining on human kidney (PMID: 10399963). The section was incubated with ab307732 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



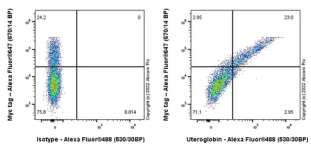
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

Immunohistochemical analysis of paraffin-embedded cell pellets with ab307666 at 1/2000 (0.271 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on (A) HEK-293T (human embryonic kidney epithelial cell) transformed with a SCGB1A1 expression vector containing a his tag, no staining on (B) HEK-293T transfected with empty vector containing a his tag. The section was incubated with ab307666 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 LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



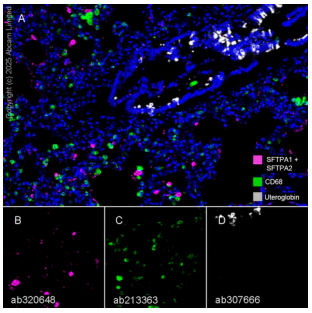
Immunocytochemistry/ Immunofluorescence - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HEK-293T (human embryonic kidney epithelial cell) cells transfected with a human Uteroglobin expression vector containing a myc-his tag cells labelling Uteroglobin with ab307666 at 1/1000 dilution (0.481 ug/ml), followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 ug/ml) (Green). Confocal image showing cytoplasmic and membranous staining in HEK-293T cells transfected with a human Uteroglobin expression vector containing a myc-his tag. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Myc-Tag Mouse mAb (Alexa Fluor® 647) was used to counterstain tubulin at 1/100 dilution (0.38 ug/ml) (Red). The nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 ug/ml).



Flow Cytometry (Intracellular) - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HEK-293T (human embryonic kidney) cells transfected with a human Uteroglobin expression vector containing a myc-his tag or a control vector containing a myc-his tag cells labelling Uteroglobin with ab307666 at 1/500 dilution (0.1ug)/ Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Multiplex immunohistochemistry - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

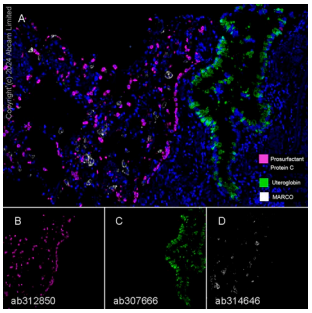
Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded human lung tissue staining SFTPA1 + SFTPA2 with ab320648 at a 1/1000 dilution, ab213363 anti-CD68 used at 1/500 dilution and ab307666 anti-Uteroglobin used at a 1/2000 dilution.

Panel A: merged staining of anti-SFTPA1+SFTPA2 (magenta; Opal™690), anti-CD68 (green; Opal™520) and anti-Uteroglobin (gray; Opal™570) on human lung.
Panel B: anti-SFTPA1+SFTPA2 staining alveolar type II cells in human lung.
Panel C: ant-CD68 staining macrophages in human lung.
Panel D: ant-Uteroglobin staining club cells in human lung.
Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab320648, ab211363 and ab307666 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins..



Multiplex immunohistochemistry - Anti-Uteroglobin antibody [EPR27144-86] (ab307666)

Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded Human lung tissue staining Prosurfactant Protein C with ab312850 at a 1:2000 (0.26 ug/ml) dilution; Uteroglobin with ab307666 at 1:2000 dilution and MARCO with ab314646 at 1:100 (5.1 ug/ml) dilution followed by a ready to use secondary antibody Opal Polymer HRP Ms + Rb.

Panel A: merged staining of anti-Prosurfactant Protein C (magenta; Opal™690), anti-Uteroglobin (green; Opal™520) and anti-MARCO (gray; Opal™570) on human lung.
Panel B: anti-Prosurfactant Protein C staining pneumocytes in human lung.
Panel C: anti-Uteroglobin staining club cells in human lung.
Panel D: anti-MARCO staining alveolar macrophages in human lung.
Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab312850, ab307666 and ab314646 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.