abcam

Product datasheet

Anti-Smoothelin antibody [R4A] ab8969

★★★★★ <u>5 Abreviews</u> <u>27 References</u> 10 Images

Overview

Product name Anti-Smoothelin antibody [R4A]

Description Mouse monoclonal [R4A] to Smoothelin

Host species Mouse

Specificity Reacts with the 59 kDa and 100 kDa protein, corresponding to smoothelin A and B, respectively,

which are exclusively found in smooth muscle cells.

Tested applications Suitable for: ICC/IF, IHC-Fr, IHC-P, WB

Species reactivity Reacts with: Chicken, Cat, Dog, Human, Pig, Monkey

Does not react with: Mouse, Rat, Hamster

Immunogen Recombinant full length protein corresponding to Smoothelin. Derived by fusion of SP2/0-Ag14

mouse myeloma cells with spleen cells from a BALB/c mouse immunized with a cytoskeletal

extract of chicken gizzard. Database link: **P53814**

General notes

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

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 or -

 $80^{\circ}\text{C}\,.$ Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.09% Sodium azide

Constituent: PBS

Purity Protein G purified

Clonality Monoclonal

Clone number R4A

Myeloma Sp2/0-Ag14

1

Isotype IgG1

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab8969 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
ICC/IF	**** <u>(1)</u>	Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
IHC-P	★★★★★ (3)	Use at an assay dependent concentration.
WB	★★★★ <u>(1)</u>	1/100 - 1/1000.

Target

Function Structural protein of the cytoskeleton.

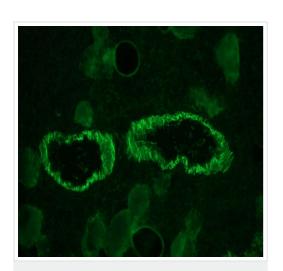
Tissue specificity Smooth muscle; contractile or vascular (for the long form).

Sequence similarities Belongs to the smoothelin family.

Contains 1 CH (calponin-homology) domain.

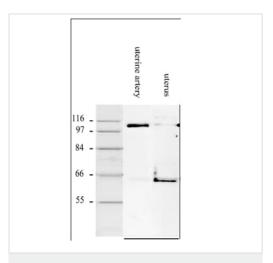
Cellular localization Cytoplasm > cytoskeleton. Exhibits a filamentous organization.

Images



Immunohistochemistry (Frozen sections) - Anti-Smoothelin antibody [R4A] (ab8969)

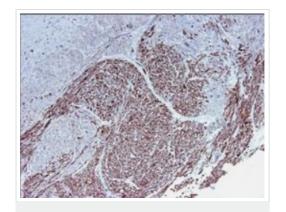
Smooth muscle cells in swine colon as detected by ab8969 (dilution 1:100).



Western blot - Anti-Smoothelin antibody [R4A] (ab8969)

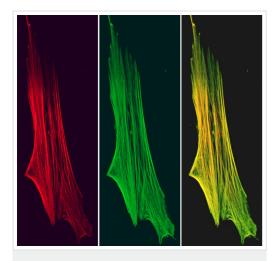
All lanes: Anti-Smoothelin antibody [R4A] (ab8969)

Lane 1 : Human uterine artery
Lane 2 : Human uterine corpus.



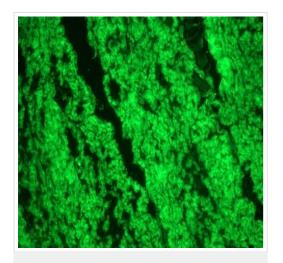
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Smoothelin antibody
[R4A] (ab8969)

Immunohistochemical analysis on paraffin section of human smooth muscle labeling Smoothelin with ab8969.



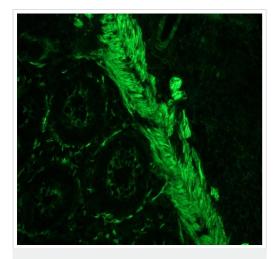
Immunocytochemistry/ Immunofluorescence - Anti-Smoothelin antibody [R4A] (ab8969)

Indirect immunofluorescence staining of a cultured human fibroblast, showing colocalization of smoothelin (red fluorescence; as detected by ab8969) and actin (green fluorescence).



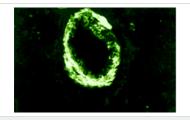
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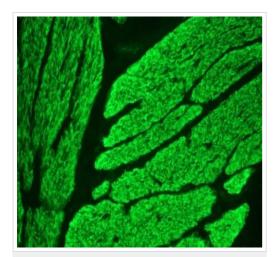
Immunohistochemistry (Frozen sections) - Anti-Smoothelin antibody [R4A] (ab8969)

Smooth muscle cells in swine colon as detected by ab8969 (dilution 1:100).



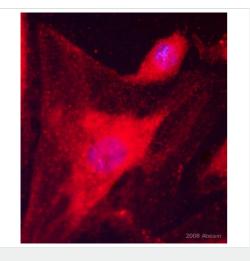
Immunocytochemistry/ Immunofluorescence - Anti-Smoothelin antibody [R4A] (ab8969)

Human blood vessel in cardiac muscle stained with the monoclonal smoothelin antibody ab8969.



Immunohistochemistry (Frozen sections) - Anti-Smoothelin antibody [R4A] (ab8969)

Immunohistochemical analysis on frozen section of chicken gizzard striated muscle labeling Smoothelin with ab8969.



Immunocytochemistry/ Immunofluorescence - Anti-Smoothelin antibody [R4A] (ab8969)

This image is courtesy of an anonymous Abreview

ab8969 staining cells from a human vascular smooth muscle cells by ICC/IF. Cells were PFA fixed and permeabilized in 0.5% Triton X-100 prior to blocking in 10% serum for 10 minutes at 21°C. The primary antibody was diluted 1/100 and incubated with the sample for 1 hour at 21°C. An Rhodamine conjugated donkey anti-mouse antibody, diluted 1/200, was used as the secondary.



Immunohistochemistry on frozen section of chicken gizzard striated muscle labeling Smoothelin with ab8969.

Smoothelin antibody [R4A] (ab8969)

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