

Product datasheet

Anti-Smoothelin antibody [EPR20044] ab219652

Recombinant RabMAb

[1 References](#) [12 Images](#)

Overview

Product name	Anti-Smoothelin antibody [EPR20044]
Description	Rabbit monoclonal [EPR20044] to Smoothelin
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human bladder and uterus lysates; Mouse and rat colon lysates. IHC-P: Human colon, stomach, skeletal muscle, bladder cancer and gastrointestinal stromal tumor (GIST) tissues; Mouse colon and heart tissues; Rat colon tissue.
General notes	<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>

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	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), PBS</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20044

Isotype

IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab219652 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 59, 110 kDa (predicted molecular weight: 99 kDa).
IHC-P		1/8000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function

Structural protein of the cytoskeleton.

Tissue specificity

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

Sequence similarities

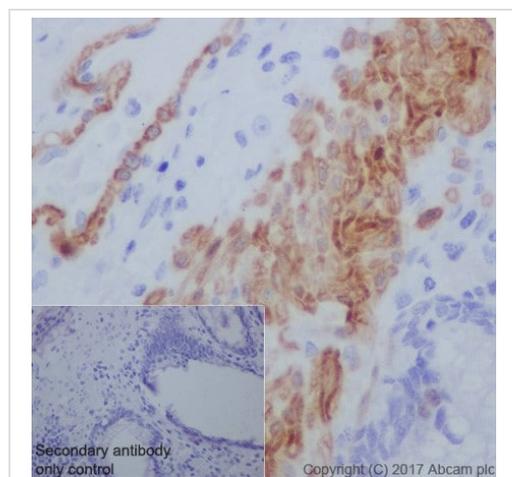
Belongs to the smoothelin family.

Contains 1 CH (calponin-homology) domain.

Cellular localization

Cytoplasm > cytoskeleton. Exhibits a filamentous organization.

Images

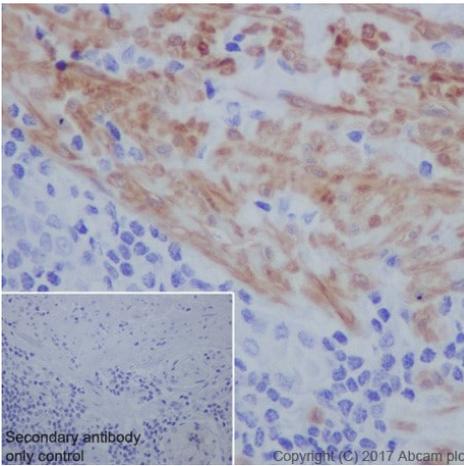


Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on vascular smooth muscle and visceral smooth muscle of human colon is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

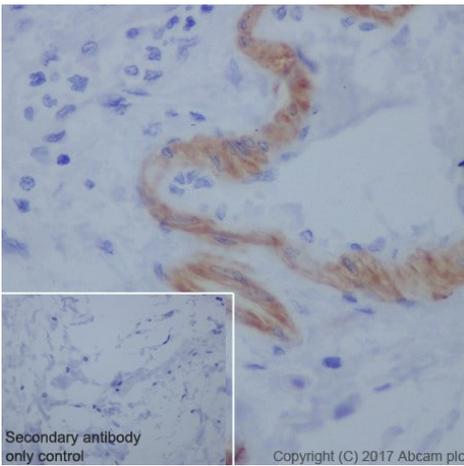


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

Immunohistochemical analysis of paraffin-embedded human stomach tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on visceral smooth muscle of human stomach is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

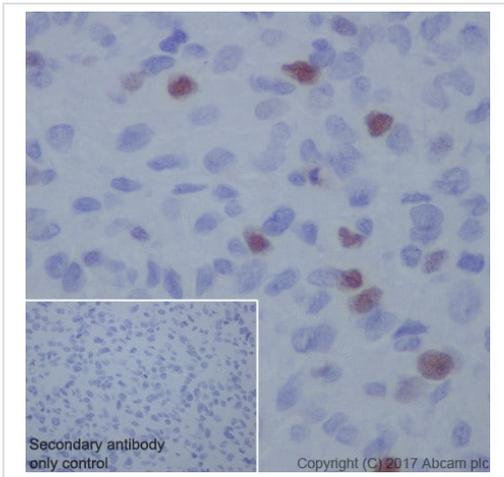


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

Immunohistochemical analysis of paraffin-embedded human bladder cancer tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on vascular smooth muscle of human bladder cancer. Negative staining on tumor cells. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

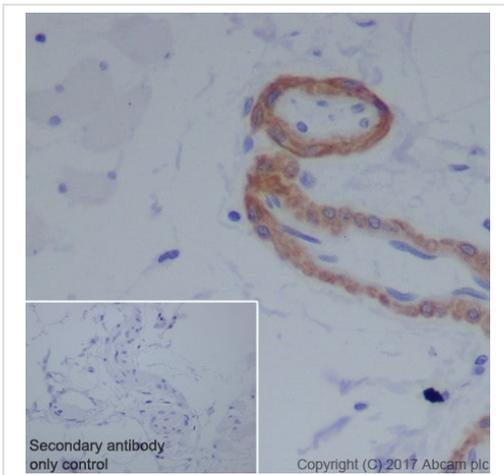


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

Immunohistochemical analysis of paraffin-embedded human gastrointestinal stromal tumor (GIST) tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on scattered tumor cells of human gastrointestinal stromal tumor (PMID: 19950405). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

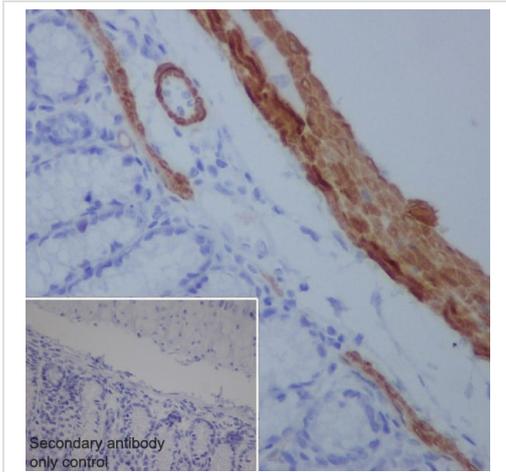


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on vascular smooth muscle of skeletal muscle. Negative staining on skeletal muscle cells. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

Immunohistochemical analysis of paraffin-embedded mouse colon tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on vascular smooth muscle and visceral smooth muscle of mouse colon is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

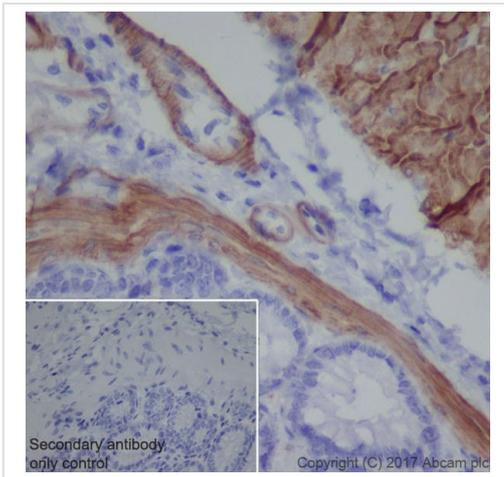


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

Immunohistochemical analysis of paraffin-embedded mouse heart tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on mouse cardiac vascular smooth muscle cells. Negative staining on myocardium. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

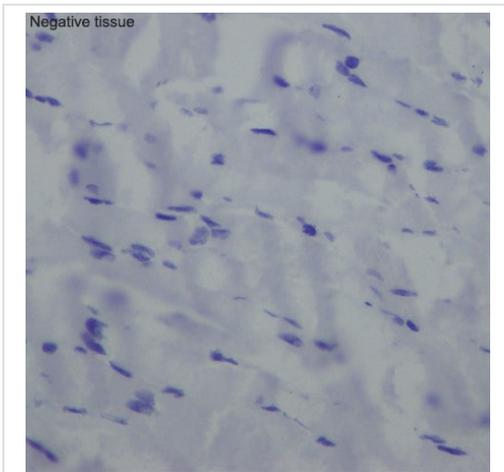


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

Immunohistochemical analysis of paraffin-embedded rat colon tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on vascular smooth muscle and visceral smooth muscle of rat colon is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



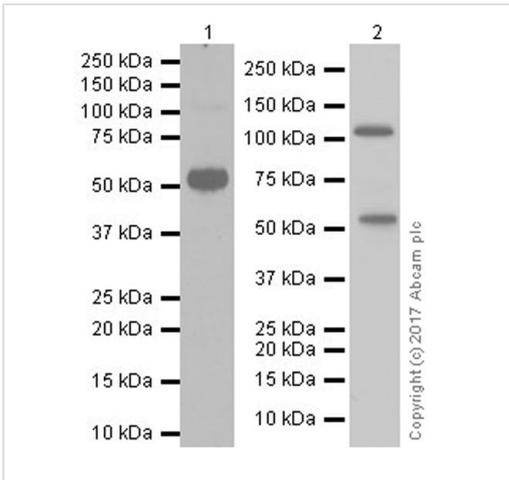
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smoothelin antibody [EPR20044] (ab219652)

Immunohistochemical analysis of paraffin-embedded rat skeletal muscle tissue labeling Smoothelin with ab219652 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Negative control: No staining on rat skeletal muscle (PMID: 8707825).

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Smoothelin antibody
[EPR20044] (ab219652)

All lanes : Anti-Smoothelin antibody [EPR20044] (ab219652) at 1/1000 dilution

Lane 1 : Human bladder lysate at 20 µg

Lane 2 : Human uterus lysate at 10 µg

Secondary

Lane 1 : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/4000 dilution

Lane 2 : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/1000 dilution

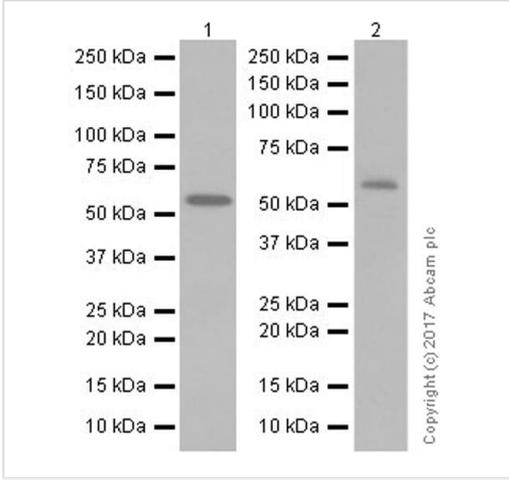
Predicted band size: 99 kDa

Observed band size: 110,59 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1: 3 minutes; Lane 2: 3 seconds.

This antibody reacts with the 59 kDa and 110 kDa bands, corresponding to isoforms A and B respectively. Smoothelin is exclusively found in smooth muscle cells (PMID:8707825).



Western blot - Anti-Smoothelin antibody
[EPR20044] (ab219652)

All lanes : Anti-Smoothelin antibody [EPR20044] (ab219652) at 1/1000 dilution

Lane 1 : Mouse colon lysate

Lane 2 : Rat colon lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 99 kDa

Observed band size: 59 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1: 30 seconds; Lane 2: 2 seconds.

This antibody reacts with a 59 kDa band in mouse and rat colon smooth muscle.

Why choose a recombinant antibody?

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

Anti-Smoothelin antibody [EPR20044] (ab219652)

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

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