Product datasheet

Anti-Smoothelin antibody [EPR20044] ab219652

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 within Human Smoothelin aa 800-900. The exact sequence is proprietary.
Database link: P53814

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

Properties

Form: Liquid


Storage buffer: Preservative: 0.01% Sodium azide
Constituents: 0.05% BSA, 40% Glycerol, PBS

Purity: Protein A purified

Clonality: Monoclonal

Clone number: EPR20044

Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab219652 in the following tested applications.
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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>1/1000. Detects a band of approximately 59, 110 kDa (predicted molecular weight: 99 kDa).</td>
<td></td>
</tr>
<tr>
<td>IHC-P</td>
<td>1/8000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
<td></td>
</tr>
</tbody>
</table>

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.
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.


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

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

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.
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.

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.
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.

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.
**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

why is the actual band size different from the predicted?

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 why is the actual band size different from the predicted?

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.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors