**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 instructions**

**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.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<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>
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<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>
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**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.
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

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).
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.

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