Overview

Product name: Anti-alpha smooth muscle Actin antibody [SP171]
Description: Rabbit monoclonal [SP171] to alpha smooth muscle Actin
Host species: Rabbit
Tested applications: Suitable for: WB, IHC-P
Species reactivity: Reacts with: Human
Predicted to work with: Mouse, Rat, Rabbit, Chicken, Cow, Pig
Immunogen: Synthetic peptide within Human alpha smooth muscle Actin aa 1-100 (N terminal). The exact sequence is proprietary.
Database link: P62736
Positive control: HeLa cell lysate; Human colon tissue.
General notes: This product is a recombinant rabbit monoclonal antibody.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer: pH: 7.60
Preservative: 0.1% Sodium azide
Constituents: 98% PBS, 1% BSA
Purity: Immunogen affinity purified
Purification notes: Purified from TCS by protein A/G.
Clonality: Monoclonal
Clone number: SP171
Isotype: IgG
Function
Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

Involvement in disease
Defects in ACTA2 are the cause of aortic aneurysm familial thoracic type 6 (AAT6) [MIM:611788]. AATs are characterized by permanent dilation of the thoracic aorta usually due to degenerative changes in the aortic wall. They are primarily associated with a characteristic histologic appearance known as ‘medial necrosis’ or ‘Erdheim cystic medial necrosis’ in which there is degeneration and fragmentation of elastic fibers, loss of smooth muscle cells, and an accumulation of basophilic ground substance.

Sequence similarities
Belongs to the actin family.

Cellular localization
Cytoplasm > cytoskeleton.

Applications
Our Abpromise guarantee covers the use of ab150301 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>
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<tbody>
<tr>
<td>WB</td>
<td>1/50. Predicted molecular weight: 42 kDa.</td>
<td></td>
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<tr>
<td>IHC-P</td>
<td>1/200.</td>
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</table>

Target

Function
Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

Involvement in disease
Defects in ACTA2 are the cause of aortic aneurysm familial thoracic type 6 (AAT6) [MIM:611788]. AATs are characterized by permanent dilation of the thoracic aorta usually due to degenerative changes in the aortic wall. They are primarily associated with a characteristic histologic appearance known as ‘medial necrosis’ or ‘Erdheim cystic medial necrosis’ in which there is degeneration and fragmentation of elastic fibers, loss of smooth muscle cells, and an accumulation of basophilic ground substance.

Sequence similarities
Belongs to the actin family.

Cellular localization
Cytoplasm > cytoskeleton.

Images

Immunohistochemical analysis of formalin fixed, paraffin embedded Human colon tissue labelling alpha smooth muscle Actin with ab150301 at 1/200 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha smooth muscle Actin antibody [SP171] (ab150301)
Anti-alpha smooth muscle Actin antibody [SP171] (ab150301) at 1/50 dilution + HeLa cell lysate

**Predicted band size:** 42 kDa

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

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