Product datasheet

Anti-Myosin, smooth muscle heavy chain 1 and 2 antibody [SMMS-1] ab106919

Overview

Product name Anti-Myosin, smooth muscle heavy chain 1 and 2 antibody [SMMS-1]
Description Mouse monoclonal [SMMS-1] to Myosin, smooth muscle heavy chain 1 and 2
Host species Mouse
Tested applications Suitable for: IHC-P
Species reactivity Reacts with: Human
Immunogen Crude Human uterus extract
Positive control Uterus or normal breast tissue. Some breast cancers, leiomyosarcoma.

Properties

Form Liquid
Storage instructions Shipped at 4°C. Store at +4°C.
Storage buffer Preservative: 0.1% Sodium azide
Clonality Monoclonal
Clone number SMMS-1
Isotype IgG1
Light chain type kappa

Applications

Our Abpromise guarantee covers the use of ab106919 in the following tested applications.

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

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<td>IHC-P</td>
<td>1/100 - 1/200. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.</td>
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**Function**
Muscle contraction.

**Tissue specificity**
Smooth muscle; expressed in the umbilical artery, bladder, esophagus and trachea.

**Involvement in disease**
Note=A chromosomal aberration involving MYH11 is found in acute myeloid leukemia of M4EO subtype. Pericentric inversion inv(16)(p13;q22). The inversion produces a fusion protein consisting of the 165 N-terminal residues of CBF-beta (PEPB2) and the tail region of MYH11. Defects in MYH11 are the cause of aortic aneurysm familial thoracic type 4 (AAT4) [MIM:132900]; also known as familial thoracic aortic aneurysm and dissection (TAAD). Aneurysms and dissections of the aorta usually result from degenerative changes in the aortic wall. Thoracic aortic aneurysms and dissections 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. Patients with AAT4 show marked aortic stiffness. Pathological aortas show large areas of medial degeneration with very low smooth muscle cells content.

**Sequence similarities**
Contains 1 IQ domain.
Contains 1 myosin head-like domain.

**Domain**
The rodlike tail sequence is highly repetitive, showing cycles of a 28-residue repeat pattern composed of 4 heptapeptides, characteristic for alpha-helical coiled coils.
Each myosin heavy chain can be split into 1 light meromyosin (LMM) and 1 heavy meromyosin (HMM). It can later be split further into 2 globular subfragments (S1) and 1 rod-shaped subfragment (S2).

**Cellular localization**
Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Thick filaments of the myofibrils.

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

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