


Product datasheet

Anti-smooth muscle Myosin heavy chain 11 antibody ab125884

★★★★★ [3 Abreviews](#) [12 References](#) [2 Images](#)

Overview

Product name	Anti-smooth muscle Myosin heavy chain 11 antibody
Description	Rabbit polyclonal to smooth muscle Myosin heavy chain 11
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Rabbit, Pig, Chimpanzee, Macaque monkey, Chinese hamster, Orangutan 
Immunogen	Synthetic peptide corresponding to Human smooth muscle Myosin heavy chain 11 aa 1-100 conjugated to keyhole limpet haemocyanin. (Peptide available as ab153753)
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

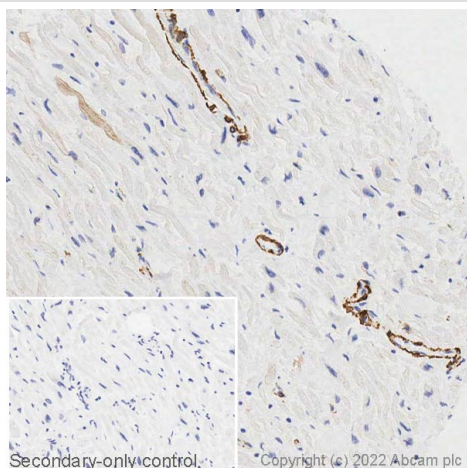
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab125884 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 227 kDa (predicted molecular weight: 227 kDa).
IHC-P	★★★★★ (1)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

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.

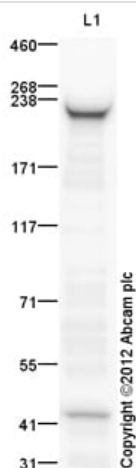
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-smooth muscle Myosin heavy chain 11 antibody (ab125884)

IHC image of smooth muscle Myosin heavy chain 11 staining in a section of formalin-fixed paraffin-embedded normal human heart* performed on a Leica BOND™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab125884, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-smooth muscle Myosin heavy chain 11 antibody (ab125884)

Anti-smooth muscle Myosin heavy chain 11 antibody (ab125884) at 1 µg/ml + Bladder (Mouse) Tissue Lysate at 10 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 227 kDa

Observed band size: 227 kDa

Additional bands at: 42 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 30 seconds

This blot was produced using a 3-8% Tris Acetate gel under the TA buffer system. The gel was run at 150V for 60 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab125884 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody

conjugated to HRP, and visualised using ECL development solution.

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