# abcam

### Product datasheet

## Anti-smooth muscle Myosin heavy chain 11 antibody ab82541

★★★☆☆ 4 Abreviews 8 References 3 图像

概述

产品名称 Anti-smooth muscle Myosin heavy chain 11抗体

描述 兔多克隆抗体to smooth muscle Myosin heavy chain 11

**宿主** Rabbit

特异性 The immunogen used for this product shares 82% homology with non-muscle myosin 9. The

cross-reactivity with this protein has not been confirmed experimentally.

Replenishment batches of our polyclonal antibody, ab82541 are tested in WB. Previous batches were additionally validated in ICC. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody,

ab124679.

经测试应用 适用于: WB, ICC

种属反应性 与反应: Human

**预测可用于:** Mouse, Rat, Rabbit, Cow, Orangutan 4

Synthetic peptide corresponding to Human smooth muscle Myosin heavy chain 11 aa 550-650

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab93494)

阳性对照 WB: Bladder tissue; Heart tissue; PC3 whole cell; HUVEC whole cell. ICC: SV40LT-SMC cell

line.

常规说明

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.

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

性能

免疫原

形式 Liquid

**存放说明** 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.

**存储溶液** pH: 7.40

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Preservative: 0.02% Sodium azide

Constituent: PBS

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.

纯**度** Immunogen affinity purified

 克隆
 多克隆

 同种型
 IgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab82541于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	* * * * * * * <u>(2)</u>	Use a concentration of 1 µg/ml. Detects a band of approximately 227 kDa (predicted molecular weight: 227 kDa).
ICC		Use a concentration of 1 µg/ml.

#### 靶标

功能 Muscle contraction.

组织**特异性** Smooth muscle; expressed in the umbilical artery, bladder, esophagus and trachea.

疾病相关 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

also known as familial thoracic abruc aneutysm and dissection (TAAD). Affectivisms 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.

序列相似性 Contains 1 IQ domain.

Contains 1 myosin head-like domain.

结**构域** 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.

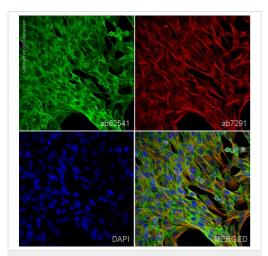
Each myosin heavy chain can be split into 1 light meromyosin (LMM) and 1 heavy meromyosin

(HMM). It can later be split further into 2 globular subfragments (S1) and 1 rod-shaped

subfragment (S2).

细胞定位 Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Thick filaments of the myofibrils.



Immunocytochemistry - Anti-smooth muscle Myosin heavy chain 11 antibody (ab82541)

L1 L2 L3 L4

460—
268—
238—
171—
117—
71—
71—
55—
41—
31—
31—
31—

Western blot - Anti-smooth muscle Myosin heavy chain 11 antibody (ab82541)

ab82541 staining smooth muscle Myosin heavy chain 11 in SV40LT-SMC cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab82541 at 1µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150117, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor<sup>®</sup> 488) preadsorbed at 1/1000 dilution (shown in green) and ab150080, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor<sup>®</sup> 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

All lanes : Anti-smooth muscle Myosin heavy chain 11 antibody (ab82541) at 1  $\mu$ g/ml

**Lane 1 :** PC3 (Human prostate carcinoma cell line) Whole Cell Lysate Whole Cell Lysate

**Lane 2 :** HUVEC (Human Umbilical Vein Endothelial Cell) Whole Cell Lysate

**Lane 3 :** Human bladder tissue lysate - soluble fraction (female, 45 years) (<u>ab44654</u>)

Lane 4: Human heart tissue lysate - total protein (ab29431)

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 227 kDa Observed band size: 227 kDa **Additional bands at:** 49 kDa, 64 kDa. We are unsure as to the identity of these extra bands.

250kDa - 150 - 100 - Western blot - Anti-smooth muscle Myosin heavy

chain 11 antibody (ab82541)

Image courtesy of an anonymous Abreview.

Exposure time: 30 seconds

Anti-smooth muscle Myosin heavy chain 11 antibody (ab82541) at 1/2000 dilution + whole cell lysate prepared from human PASMC, P6 at 300  $\mu g$ 

#### Secondary

HRP conjugated goat anti-rabbit polyclonal at 1/2000 dilution

Developed using the ECL technique.

**Predicted band size:** 227 kDa **Observed band size:** 227 kDa

Additional bands at: 100 kDa, 200 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 20 seconds

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

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