


HRP Anti-alpha smooth muscle Actin antibody [1A4] ab203696

敲除 验证

3 图像

概述

产品名称	HRP Anti-alpha smooth muscle Actin抗体[1A4]
描述	HRP小鼠单克隆抗体[1A4] to alpha smooth muscle Actin
宿主	Mouse
偶联物	HRP
经测试应用	适用于: IHC-P, WB
种属反应性	与反应: Human 预测可用于: Mouse, Rat, Sheep, Rabbit, Cow, Pig, Mammals, Baboon 
免疫原	Synthetic peptide corresponding to Human alpha smooth muscle Actin (N terminal). Database link: P62736
阳性对照	WB: A431 and Jurkat whole cell lines. IHC-P: Normal human colon tissue sections
常规说明	<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>

性能

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. Avoid freeze / thaw cycle. Store In the Dark.
存储溶液	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: PBS, 1% BSA, 30% Glycerol (glycerin, glycerine)
纯度	Affinity purified
克隆	单克隆
克隆编号	1A4

同种型 IgG2a
轻链类型 kappa

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab203696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
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/5000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa).

靶标

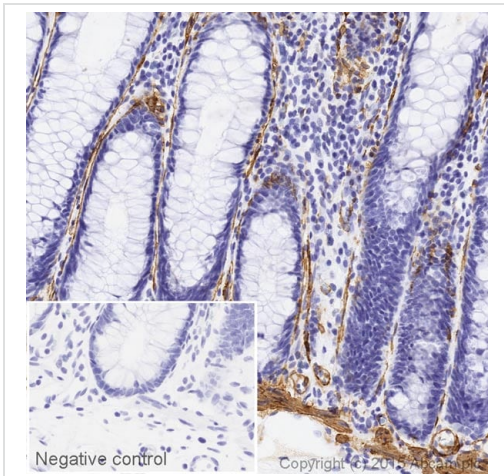
功能 Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

疾病相关 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.

序列相似性 Belongs to the actin family.

细胞定位 Cytoplasm > cytoskeleton.

图片

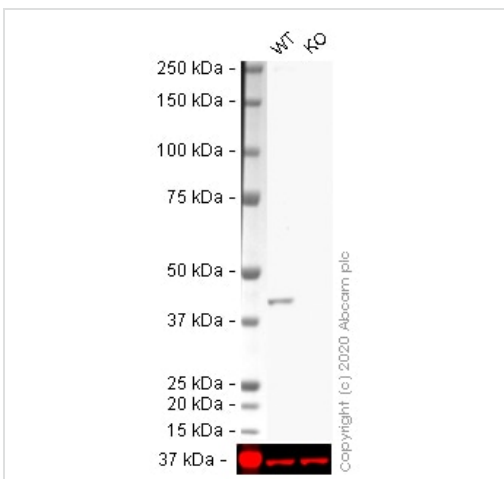


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - HRP Anti-alpha smooth muscle Actin antibody [1A4] (ab203696)

IHC image of alpha smooth muscle Actin staining in a section of formalin-fixed paraffin-embedded normal human colon*, performed on a Leica BOND™. 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 ab203696, 1/100 dilution, for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

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.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - HRP Anti-alpha smooth muscle Actin antibody [1A4] (ab203696)

All lanes : HRP Anti-alpha smooth muscle Actin antibody [1A4] (ab203696) at 1/5000 dilution

Lane 1 : Wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : ACTA2 knockout HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

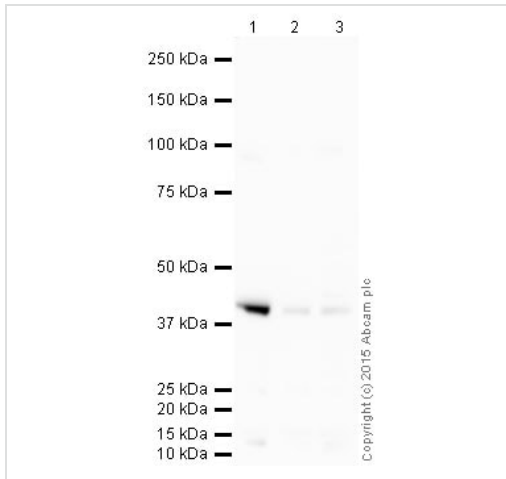
Performed under reducing conditions.

Predicted band size: 42 kDa

Observed band size: 42 kDa

Exposure time: 20 seconds

ab203696 was shown to react with alpha smooth muscle Actin (HRP) in HeLa wild-type cells in western blot. Loss of signal was observed when ACTA2 knockout sample was used. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab203696 overnight at 4°C at a 1 in 5000 Dilution and **ab184095** (Mouse Anti-GAPDH antibody [mAbcam 9484] - Alexa Fluor® 680) at a 1 in 1000 dilution. Blots were developed with Optiblot ECL reagent (**ab133456**) and imaged.



Western blot - HRP Anti-alpha smooth muscle Actin antibody [1A4] (ab203696)

All lanes : HRP Anti-alpha smooth muscle Actin antibody [1A4] (ab203696) at 1/5000 dilution

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 3 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 42 kDa

Observed band size: 42 kDa

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab203696 overnight at 4°C. Antibody binding was visualised using ECL development solution [ab133406](#).

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

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