abcam

Product datasheet

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



画像数3

製品の概要

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

製品の詳細 HRP Mouse monoclonal [1A4] to alpha smooth muscle Actin

由来種 Mouse 標識 HRP

 アプリケーション
 適用あり: IHC-P, WB

 種交差性
 交差種: Human

交差が予測される動物種: Mouse, Rat, Sheep, Rabbit, Cow, Pig, Mammals, Baboon

A

免疫原 Synthetic peptide corresponding to Human alpha smooth muscle Actin (N terminal).

Database link: P62736

ポジティブ・コントロール

特記事項

WB: A431 and Jurkat whole cell lines. IHC-P: Normal human colon tissue sections

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

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.40

Preservative: 0.1% Proclin 300 Solution

Constituents: PBS, 1% BSA, 30% Glycerol (glycerin, glycerine)

精製度 Affinity purified ポリ/モノ モノクローナル

クローン名 1A4

1

アイソタイプ lgG2a 軽鎖の種類 kappa

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab203696の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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).

ターゲット情報

機能 Actins are highly conserved proteins that are involved in various types of cell motility and are

ubiquitously expressed in all eukaryotic cells.

関連疾患 Defects in ACTA2 are the cause of aortic aneurysm familial thoracic type 6 (AAT6) [MIM:611788].

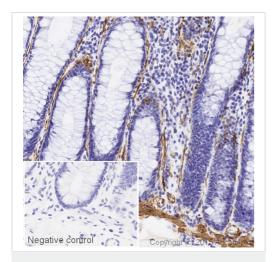
AATs are characterized by permanent dilation of the thoracic aorta usually due to degenerative changes in the aortic wall. They are primarily associated with a characteristic histologic appearance known as 'medial necrosis' or 'Erdheim cystic medial necrosis' in which there is

degeneration and fragmentation of elastic fibers, loss of smooth muscle cells, and an

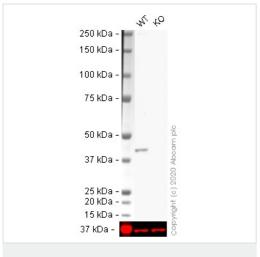
accumulation of basophilic ground substance.

配列類似性 Belongs to the actin family. 細胞内局在 Cytoplasm > cytoskeleton.

画像



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



Western blot - 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

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

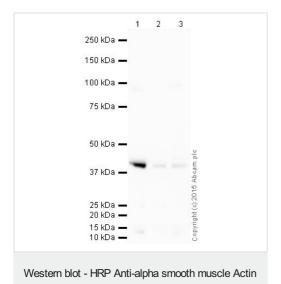
Lysates/proteins at 20 µg per lane.

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.



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

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**.

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