abcam

Product datasheet

Anti-Actin antibody - Loading Control ab1801

11 Abreviews 221 References 画像数 5

製品の概要

製品名	Anti-Actin antibody - Loading Control
製品の詳細	Rabbit polyclonal to Actin - Loading Control
由来種	Rabbit
特異性	From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch, please contact our Scientific Support who will be happy to help. This antibody recognises beta and gamma actin in Human samples. It probably also recognises all the other known forms of Human actin. This antibody detects a single clean band in Human, Mouse, Rat, Chicken and Drosophila samples. In Xenopus laevis a secondary band is detected at about 30kDa. We are unsure whether this is cross-reaction with another actin isoform or merely non-specific. In Cow a doublet is detected, which probably represents different forms of actin.
アプリケーション	**適用あり:** WB, IHC-P **適用なし:** ICC/IF
種交差性	**交差種:** Mouse, Rat, Human **交差が予測される動物種:** Rabbit, Chicken, Cow, Saccharomyces cerevisiae, Xenopus laevis, Drosophila melanogaster, Zebrafish, Orangutan
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	HeLa whole cell lysate or mouse brain lysate. IHC-P - Human Colon FFPE tissue section
特記事項	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 or -80°C. Avoid freeze / thaw cycle.

バッファー	pH: 7.40 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.
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab1801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
WB	★★★★☆ (9)	1/1000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa). Block in 5% BSA. Blocking in milk significantly reduces the signal.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

追加情報 Is unsuitable for ICC/IF.

ターゲット情報

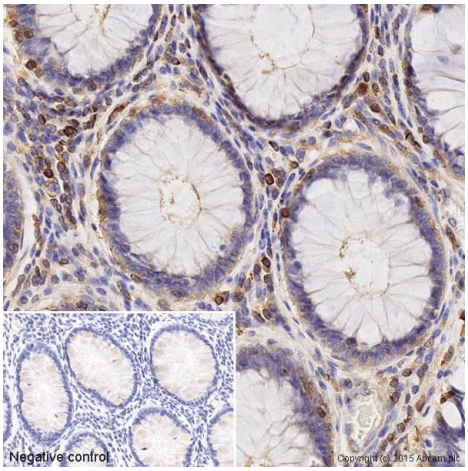
機能 Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

関連疾患 Defects in ACTA1 are the cause of nemaline myopathy type 3 (NEM3) [MIM:161800]. A form of nemaline myopathy. Nemaline myopathies are muscular disorders characterized by muscle weakness of varying severity and onset, and abnormal thread-or rod-like structures in muscle fibers on histologic examination. The phenotype at histological level is variable. Some patients present areas devoid of oxidative activity containg (cores) within myofibers. Core lesions are unstructured and poorly circumscribed.
Defects in ACTA1 are a cause of myopathy congenital with excess of thin myofilaments (MPCETM) [MIM:161800]. A congenital muscular disorder characterized at histological level by areas of sarcoplasm devoid of normal myofibrils and mitochondria, and replaced with dense masses of thin filaments. Central cores, rods, ragged red fibers, and necrosis are absent.
Defects in ACTA1 are a cause of congenital myopathy with fiber-type disproportion (CFTD) [MIM:255310]; also known as congenital fiber-type disproportion myopathy (CFTDM). CFTD is a genetically heterogeneous disorder in which there is relative hypotrophy of type 1 muscle fibers compared to type 2 fibers on skeletal muscle biopsy. However, these findings are not specific and can be found in many different myopathic and neuropathic conditions.

配列類似性 Belongs to the actin family.

細胞内局在 Cytoplasm > cytoskeleton.

画像

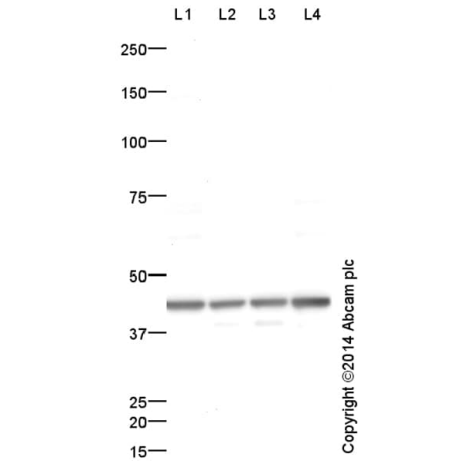


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Actin antibody - Loading Control (ab1801)

IHC image of ab1801 staining Actin in normal human colon formalin-fixed paraffin-embedded tissue sections*, 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 20 mins. The section was then incubated with ab1801, 5µl/ml concentration, 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. No primary antibody was used in the negative control (shown on the inset).

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 - Anti-Actin antibody - Loading Control (ab1801)

All lanes : Anti-Actin antibody - Loading Control (ab1801) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate
Lane 2 : Brain (Rat) Tissue Lysate
Lane 3 : Brain (Mouse) Tissue Lysate
Lane 4 : NIH/3T3 whole cell lysate (**ab7179**)

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

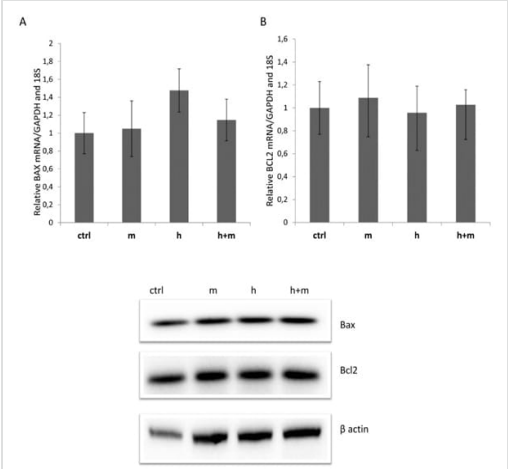
Developed using the ECL technique.

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 ab1801 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**



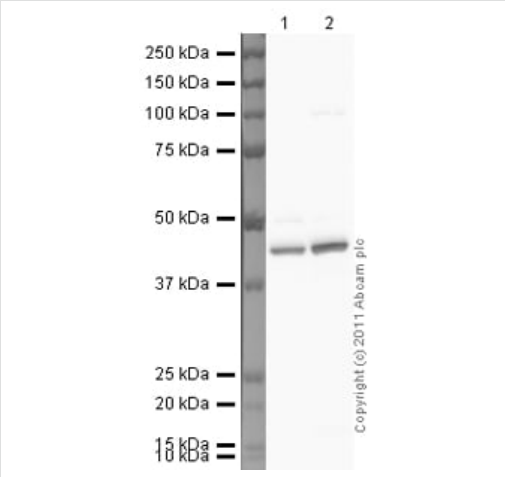
Western blot - Anti-Actin antibody - Loading Control (ab1801)

Image from PLoS One. 2014; 9(3): e92128. Fig 9,•DOI: 10.1371/journal.pone.0092128 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Western blot analysis of HeLa cells treated for 12 hours with hesperidin (**h**) (2.5 µg/ml, 4,01 µM), mangiferin (5 µg/ml, 11.84 µM) (**m**), and hesperidin (2.5 µg/ml, 4.01 µM) in a presence of mangiferin (5 µg/ml, 11.84 µM) (**h+m**). Immunoblotting was performed with the following primary antibodies: Bax (**ab32503**), BCL2 (**ab59348**), beta actin (ab1801), and caspase 8. After the washing steps, the membranes were incubated with goat anti-rabbit IgG (H+L) or with goat anti-mouse IgG (H+L) HRP-conjugated secondary antibodies and detected using ECL. Densitometry was performed using Image Lab software v. 4.1 (BioRad).

Top panel: Following 12h of treatment of HeLa cells with hesperidin (**h**), mangiferin (**m**), and hesperidin in a presence of mangiferin (**h+m**), the mRNA levels were monitored in real - time PCR experiments. The BAX and BCL2 mRNA levels results from 2 independent experiments (n?=?8) are plotted relative to glyceraldehyde-3-phosphate dehydrogenase (GAPDH) and 18S rRNA levels and expressed as a fold change over the EtOH control. Error bars represent standard derivations.

Bottom panel: Following 12h of treatment of HeLa cells with hesperidin (**h**), mangiferin (**m**), and hesperidin in a presence of mangiferin (**h+m**), the protein levels of Bax and BCL2 were detected with SDS-PAGE and Western Blot and related to beta actin levels.



Western blot - Anti-Actin antibody - Loading Control (ab1801)

All lanes : Anti-Actin antibody - Loading Control (ab1801) at 1 µg/ml

Lane 1 : Brain (Mouse) Tissue Lysate (**ab27253**)
Lane 2 : NIH/3T3 (Mouse) Whole Cell Lysate (**ab52956**)

Lysates/proteins at 10 µg per lane.

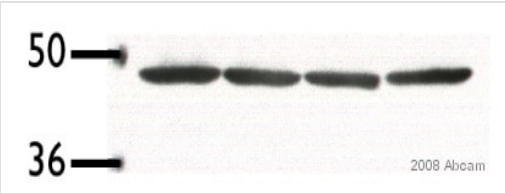
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 42 kDa

Exposure time: 30 seconds



Western blot - Anti-Actin antibody - Loading Control (ab1801)

This image is courtesy of an anonymous Abreview

All lanes : Anti-Actin antibody - Loading Control (ab1801) at 1/1000 dilution

All lanes : Whole cell lysates prepared from HUVEC cells

Lysates/proteins at 15 µg per lane.

Secondary
All lanes : HRP-conjugated goat polyclonal to rabbit Ig at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 42 kDa

Exposure time: 30 seconds

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