# abcam

## Product datasheet

## Anti-Actin antibody [EPR16875] ab200658



重组 RabMAb

3 References 7 图像

#### 概述

产品名称 Anti-Actin抗体[EPR16875]

描述 兔单克隆抗体[EPR16875] to Actin

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), WB, ICC/IF 种属反应性 与反应: Mouse, Rat, Chicken, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Jurkat, HepG2, HeLa, UMNSAH/DF-1, C6 and RAW 264.7 cell lysates; Mouse brain, heart,

kidney and spleen lysates; Rat brain, heart and kidney lysates. ICC/IF: HeLa cells. Flow Cyt (intra):

HeLa cells

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

#### 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 long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

EPR16875 克隆编号

同种型 lgG

#### 应用

## The Abpromise guarantee

#### Abpromise™承诺保证使用ab200658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
Flow Cyt (Intra)		1/100.
WB		1/2000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa).
ICC/IF		1/1000.

#### 靶标

#### 功能

#### 疾病相关

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

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.

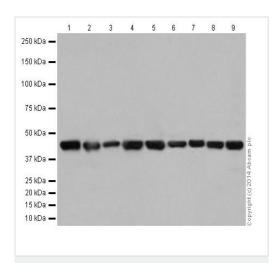
#### 序列相似性

细胞定位

Belongs to the actin family.

Cytoplasm > cytoskeleton.

#### 图片



Western blot - Anti-Actin antibody [EPR16875] (ab200658)

**All lanes :** Anti-Actin antibody [EPR16875] (ab200658) at 1/2000 dilution

Lane 1: Mouse brain lysate

Lane 2: Mouse heart lysate

Lane 3: Mouse kidney lysate

Lane 4: Mouse spleen lysate

Lane 5: Rat brain lysate

Lane 6: Rat heart lysate

Lane 7: Rat kidney lysate

Lane 8: C6 (Rat glial tumor cells) cell lysate

Lane 9: RAW 264.7 (Mouse macrophage cells transformed with

Abelson murine leukemia virus) cell lysate

Lysates/proteins at 10 µg per lane.

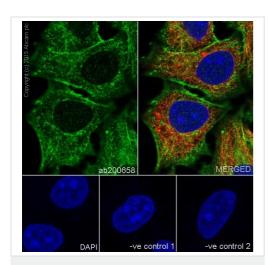
## **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

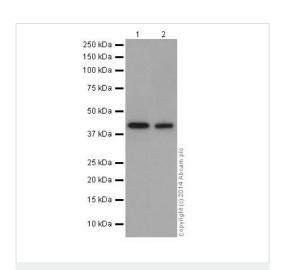
Predicted band size: 42 kDa Observed band size: 42 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Actin antibody [EPR16875] (ab200658)



Western blot - Anti-Actin antibody [EPR16875] (ab200658)

Immunofluorescent analysis of 100% Methanol-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling Actin with ab200658 at 1/1000 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Cytoplasm staining on HeLa cell line is observed.

The nuclear counter stain is DAPI (blue). Tubulin is detected with <a href="mailto:ab7291"><u>ab7291</u></a> (anti-Tubulin mouse mAb) at 1/1000 dilution and <a href="mailto:ab150120"><u>ab150120</u></a> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab200658 at 1/1000 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution. -ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/500 dilution.

**All lanes :** Anti-Actin antibody [EPR16875] (ab200658) at 1/10000 dilution

**Lane 1 :** Jurkat (Human T cell leukemia cells from peripheral blood) cell lysate

Lane 2: HepG2 (Human liver hepatocellular carcinoma) cell lysate

Lysates/proteins at 10 µg per lane.

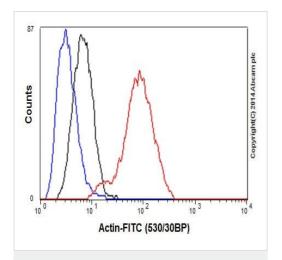
#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

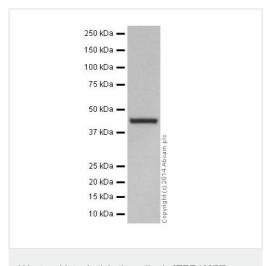
**Predicted band size:** 42 kDa **Observed band size:** 42 kDa

#### Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Flow Cytometry (Intracellular) - Anti-Actin antibody [EPR16875] (ab200658) Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling Actin with ab200658 at 1/100 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/500 dilution was used as the secondary antibody.



Western blot - Anti-Actin antibody [EPR16875] (ab200658)

Anti-Actin antibody [EPR16875] (ab200658) at 1/2000 dilution + HeLa (Human epithelial cells from cervix adenocarcinoma) cell lysate at 20 µg

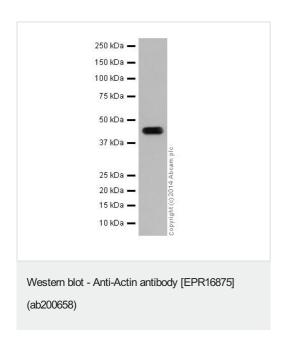
## Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 42 kDa Observed band size: 42 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-Actin antibody [EPR16875] (ab200658) at 1/2000 dilution + UMNSAH/DF-1 (Transformed chicken embyronic fibroblast cells) cell lysate at 10 µg

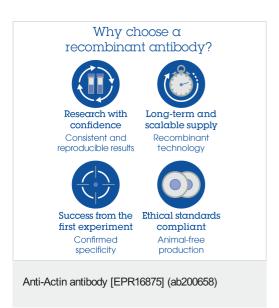
### **Secondary**

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 42 kDa Observed band size: 42 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



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

## Our Abpromise to you: Quality guaranteed and expert technical support

• Replacement or refund for products not performing as stated on the datasheet

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

## Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors