

Anti-Actin antibody [EPR16769] ab179467

重组 RabMAb

★★★★★ **11 Abreviews** **355 References** **13 图像**

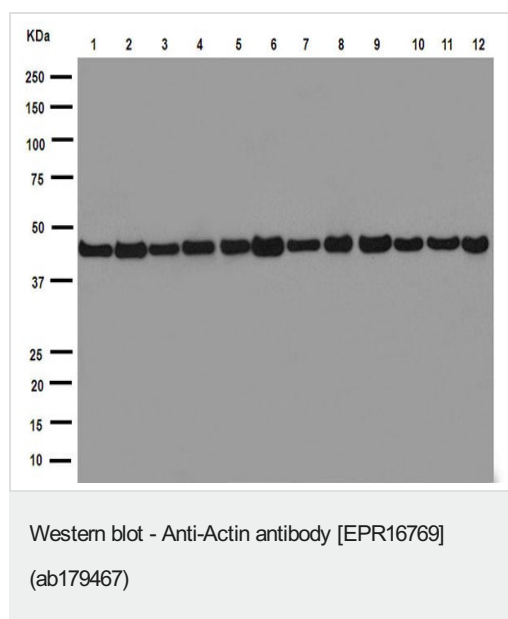
概述

产品名称	Anti-Actin抗体[EPR16769]
描述	兔单克隆抗体[EPR16769] to Actin
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
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: HeLa, 293T, C6, RAW 264.7, PC-12, NIH/3T3 and UMNSAH/DF-1 whole cell lysates; human skeletal muscle, fetal spleen, fetal brain, fetal heart, fetal kidney and cardiac muscle tissue lysates; mouse and rat brain, heart, kidney and spleen tissue lysates. IHC-P: Human prostate hyperplasia, mouse skeletal muscle, and rat skeletal muscle tissues. ICC/IF: NIH/3T3 cells. IP: NIH/3T3 whole cell extract. Flow Cyt (intra): HeLa cells.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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 long term. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR16769

同种型	IgG	
应用		
<div>The Abpromise guarantee</div> <div>Abpromise™承诺保证使用ab179467于以下的经测试应用</div> <div>“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。</div>		
应用	Ab评论	说明
Flow Cyt (Intra)		1/70.
WB	★★★★★ (8)	1/5000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa).
IHC-P		1/500 - 1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (3)	1/50.
IP		1/40.
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	<div>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.</div> <div>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.</div> <div>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.</div>	
序列相似性	Belongs to the actin family.	
细胞定位	Cytoplasm > cytoskeleton.	
图片		



All lanes : Anti-Actin antibody [EPR16769] (ab179467) at 1/20000 dilution

Lane 1 : Mouse brain tissue lysate

Lane 2 : Mouse heart tissue lysate

Lane 3 : Mouse kidney tissue lysate

Lane 4 : Mouse spleen tissue lysate

Lane 5 : Rat brain tissue lysate

Lane 6 : Rat heart tissue lysate

Lane 7 : Rat kidney tissue lysate

Lane 8 : Rat spleen tissue lysate

Lane 9 : C6 (Rat glial tumor cells) whole cell lysates

Lane 10 : RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate

Lane 11 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lane 12 : NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

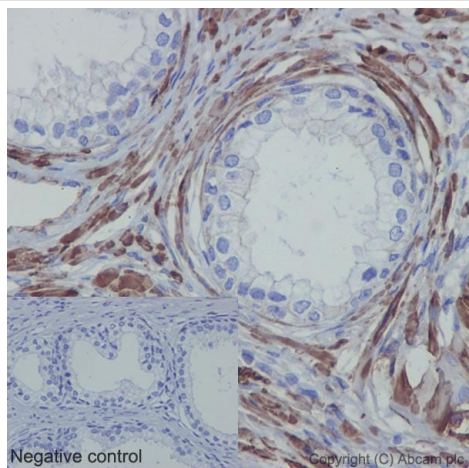
Secondary

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

Predicted band size: 42 kDa

Observed band size: 42 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

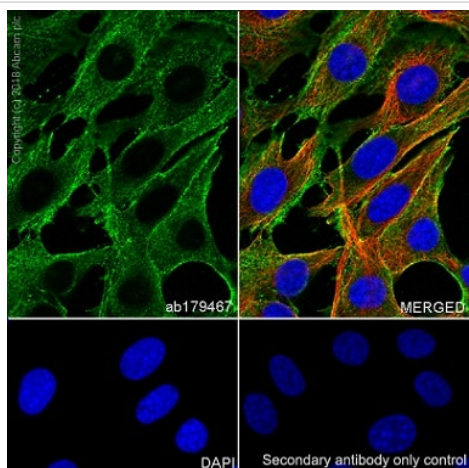


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Actin antibody
[EPR16769] (ab179467)

Immunohistochemical analysis of paraffin-embedded Human prostate hyperplasia tissue labeling Actin with ab179467 at 1/1000 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Cytoplasm staining on smooth muscle cells is observed. Counter stained with Hematoxylin.

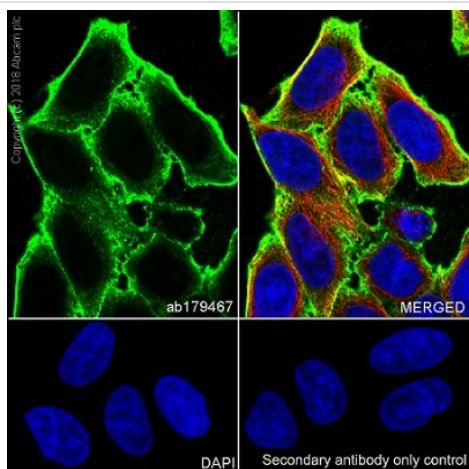
Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



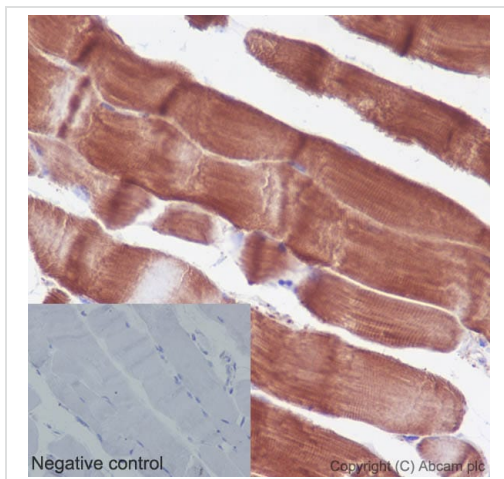
Immunocytochemistry/ Immunofluorescence - Anti-Actin antibody [EPR16769] (ab179467)

Immunocytochemistry/ Immunofluorescence analysis of NIH/3T3 (Mouse embryonic fibroblast) cells labeling Actin with Purified ab179467 at 1:100 dilution (6.98 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 dilution (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunocytochemistry/ Immunofluorescence - Anti-Actin antibody [EPR16769] (ab179467)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelia cell) cells labeling Actin with Purified ab179467 at 1:100 dilution (6.98 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 dilution (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

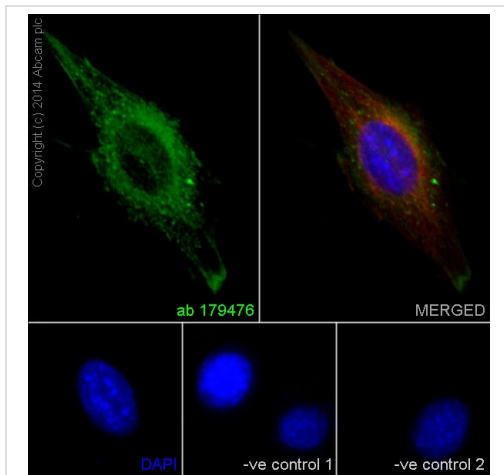


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Actin antibody [EPR16769] (ab179467)

Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscle tissue labeling Actin with ab179467 at 1/1000 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Cytoplasm staining is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



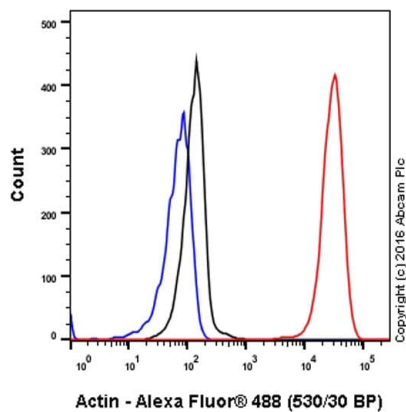
Immunocytochemistry/ Immunofluorescence - Anti-Actin antibody [EPR16769] (ab179467)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (Mouse embryo fibroblast cells) cells labeling Actin with ab179467 at 1/50 dilution, followed by Goat anti-rabbit Alexa Fluor® 488 (IgG) (**ab150077**) secondary antibody at 1/200 dilution (green). Cytoplasm staining on NIH/3T3 cell line is observed. The nuclear counter stain is DAPI (blue).

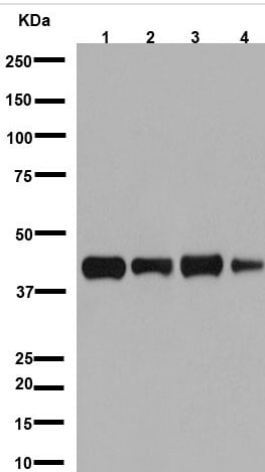
Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution and **ab150120** (goat anti-mouse Alexa Fluor® 594 secondary) at 1/500 dilution (red).

The negative controls are as follows;

1. ab179467 at 1/50 dilution followed by **ab150120** (goat anti-mouse Alexa Fluor® 594 secondary) at 1/500 dilution.
2. **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution followed by **ab150077** (goat anti-rabbit Alexa Fluor® 488 (IgG H&L) at 1/200 dilution.



Flow Cytometry (Intracellular) - Anti-Actin antibody
[EPR16769] (ab179467)



Western blot - Anti-Actin antibody [EPR16769]
(ab179467)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labelling Actin with purified ab179467 at 1/70 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. An Alexa Fluor[®]488-conjugated goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

All lanes : Anti-Actin antibody [EPR16769] (ab179467) at 1/20000 dilution

Lane 1 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysates

Lane 2 : 293T (Human epithelial cells from embryonic kidney) whole cell lysates

Lane 3 : Human skeletal muscle tissue lysate

Lane 4 : Human fetal spleen tissue lysate

Lysates/proteins at 20 µg per lane.

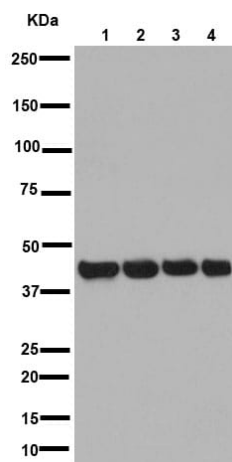
Secondary

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

Predicted band size: 42 kDa

Observed band size: 42 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Actin antibody [EPR16769] (ab179467)

All lanes : Anti-Actin antibody [EPR16769] (ab179467) at 1/5000 dilution

Lane 1 : Human fetal brain tissue lysate

Lane 2 : Human fetal heart tissue lysate

Lane 3 : Human fetal kidney tissue lysate

Lane 4 : Human fetal spleen tissue lysate

Lysates/proteins at 10 µg per lane.

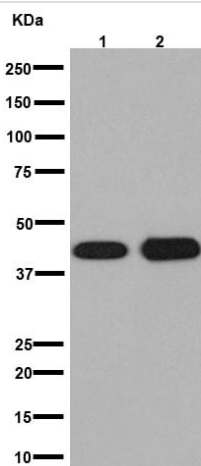
Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 42 kDa

Observed band size: 42 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Actin antibody [EPR16769] (ab179467)

All lanes : Anti-Actin antibody [EPR16769] (ab179467) at 1/20000 dilution

Lane 1 : UMNSAH/DF-1 (Transformed chicken embryonic fibroblast cells) whole cell lysates)

Lane 2 : Human cardiac muscle tissue lysate

Lysates/proteins at 10 µg per lane.

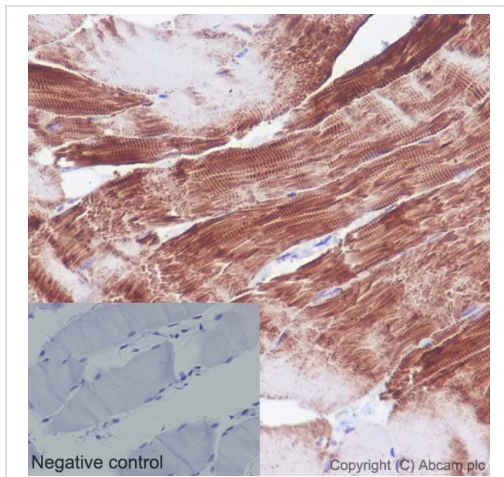
Secondary

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

Predicted band size: 42 kDa

Observed band size: 42 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

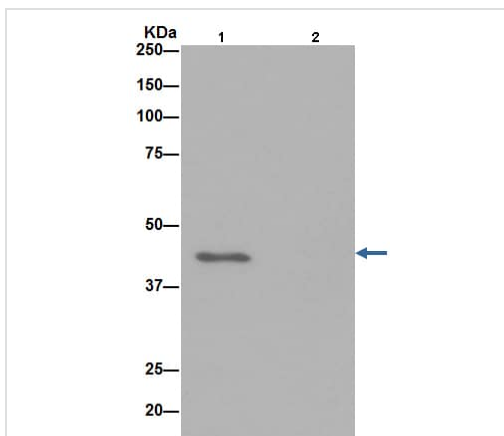


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Actin antibody
[EPR16769] (ab179467)

Immunohistochemical analysis of paraffin-embedded Rat skeletal muscle tissue labeling Actin with ab179467 at 1/1000 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Cytoplasm staining is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Actin antibody
[EPR16769] (ab179467)

Actin was immunoprecipitated from 1mg of NIH/3T3 (Mouse embryo fibroblast cells) whole cell extract with ab179467 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab179467 at 1/1000 dilution. Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated was used as secondary antibody at 1/1000 dilution.

Lane 1: NIH/3T3 whole cell extract.

Lane 2: PBS instead of NIH/3T3 whole cell extract.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Actin antibody [EPR16769] (ab179467)

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