

## Product datasheet

### Anti-ACTN3 antibody [EP2531Y] ab68204

Recombinant RabMAb

★★★★★ [4 Abreviews](#) [4 References](#) [7 Images](#)

#### Overview

<b>Product name</b>	Anti-ACTN3 antibody [EP2531Y]
<b>Description</b>	Rabbit monoclonal [EP2531Y] to ACTN3
<b>Host species</b>	Rabbit
<b>Specificity</b>	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P <b>Unsuitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as <a href="#">ab127135</a> )
<b>Positive control</b>	WB: Human skeletal muscle, Mouse skeletal muscle, and Rat skeletal muscle lysates. IHC-P: human skeletal muscle tissue. Flow Cyt (intra): L6 cells.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number	EP2531Y
Isotype	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab68204 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

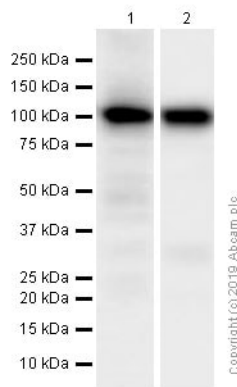
Application	Abreviews	Notes
Flow Cyt (Intra)		1/30. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/5000 - 1/10000. Detects a band of approximately 103 kDa (predicted molecular weight: 103 kDa). Can be blocked with <b>Recombinant Human ACTN3 protein (ab127135)</b> .
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. See <b>IHC antigen retrieval protocols</b> .

**Application notes** Is unsuitable for IP.

## Target

<b>Function</b>	F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein.
<b>Tissue specificity</b>	Expressed only in a subset of type 2 skeletal muscle fibers.
<b>Sequence similarities</b>	Belongs to the alpha-actinin family. Contains 1 actin-binding domain. Contains 2 CH (calponin-homology) domains. Contains 2 EF-hand domains. Contains 4 spectrin repeats.

## Images



Western blot - Anti-ACTN3 antibody [EP2531Y] (ab68204)

**All lanes :** Anti-ACTN3 antibody [EP2531Y] (ab68204) at 1/20000 dilution (Purified)

**Lane 1 :** Mouse skeletal muscle lysates

**Lane 2 :** Rat skeletal muscle lysates

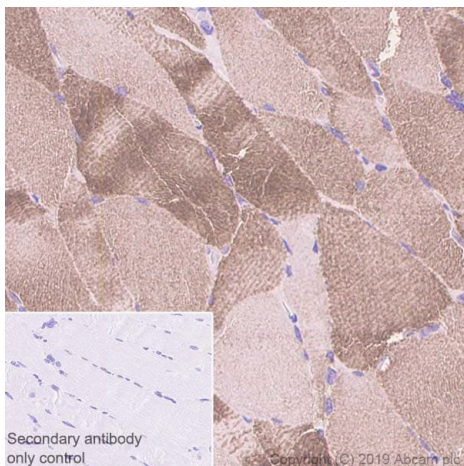
Lysates/proteins at 15 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

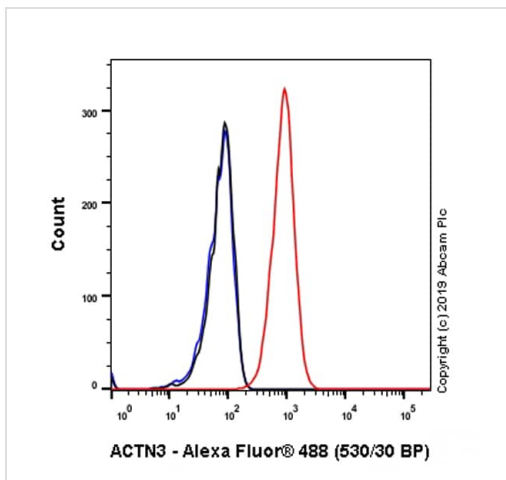
**Predicted band size:** 103 kDa

**Observed band size:** 100 kDa



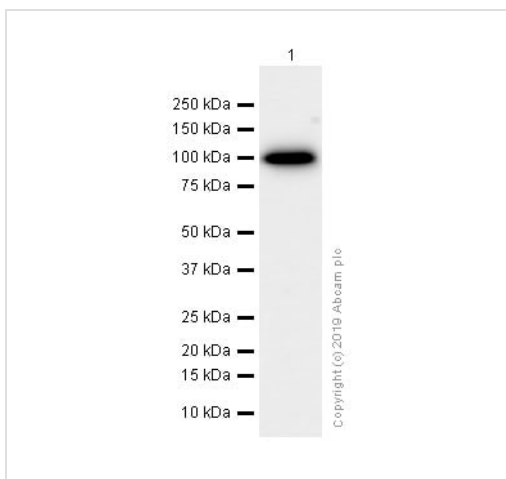
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACTN3 antibody [EP2531Y] (ab68204)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human skeletal muscle tissue sections labeling ACTN3 with purified ab68204 at 1/250 dilution (0.97 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Flow Cytometry (Intracellular) - Anti-ACTN3 antibody  
[EP2531Y] (ab68204)

Intracellular Flow Cytometry analysis of L6 (Rat skeletal muscle myoblast) cells labeling ACTN3 with purified ab68204 at 1/30 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-ACTN3 antibody [EP2531Y]  
(ab68204)

**All lanes :** Anti-ACTN3 antibody [EP2531Y] (ab68204) at 1/5000 dilution (Purified)

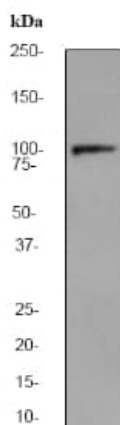
**Lane 1 :** Human skeletal muscle lysates at 15 µg

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 103 kDa

**Observed band size:** 100 kDa



Western blot - Anti-ACTN3 antibody [EP2531Y]  
(ab68204)

Anti-ACTN3 antibody [EP2531Y] (ab68204) at 1/10000 dilution  
((unpurified)) + human skeletal muscle lysate at 10 µg

### Secondary

HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 103 kDa

**Observed band size:** 103 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-ACTN3 antibody  
[EP2531Y] (ab68204)

Immunohistochemical analysis of paraffin-embedded human muscle  
tissue using unpurified ab68204 at 1/100-1/250 dilution.

Perform heat mediated antigen retrieval before commencing with  
IHC staining protocol.

### 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-ACTN3 antibody [EP2531Y] (ab68204)

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

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