

# Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free ab283513

Recombinant RabMAb

12 Images

### Overview

<b>Product name</b>	Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR24753-28] to Cofilin (phospho S3) - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, Dot blot, IHC-P, ICC/IF, Flow Cyt (Intra) <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.
<b>Positive control</b>	WB: HeLa, 293T, NIH/3T3 and C6 lysates all without alkaline phosphatase treatment. IHC-P: Human breast carcinoma, Human stomach, Mouse colon, Rat colon tissues all without alkaline phosphatase treatment. ICC/IF: HeLa cells without alkaline phosphatase treatment. Flow Cyt-intra: HeLa cell. Dot Blot: Cofilin-1 (phospho S3) peptide.
<b>General notes</b>	<p>ab283513 is the carrier-free version of <a href="#">ab283500</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p>

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C.
<b>Storage buffer</b>	pH: 7.20 Constituent: 100% PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR24753-28
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab283513 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
<b>WB</b>		Use at an assay dependent concentration. Predicted molecular weight: 18 kDa.
<b>Dot blot</b>		Use at an assay dependent concentration.
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
<b>ICC/IF</b>		Use at an assay dependent concentration.
<b>Flow Cyt (Intra)</b>		Use at an assay dependent concentration.

**Application notes** Is unsuitable for IP.

## Target

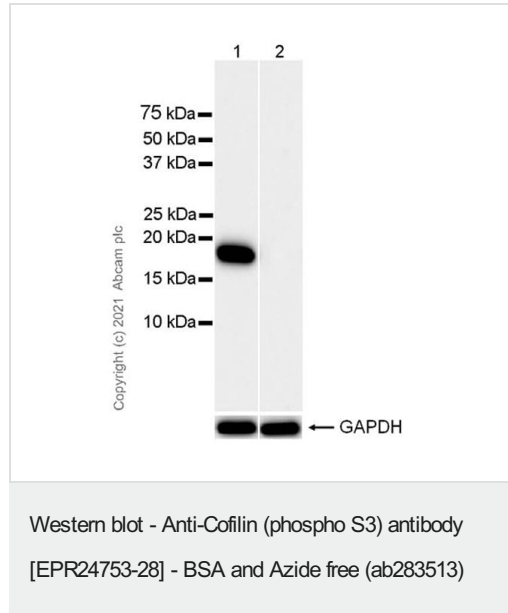
<b>Function</b>	Controls reversibly actin polymerization and depolymerization in a pH-sensitive manner. It has the ability to bind G- and F-actin in a 1:1 ratio of cofilin to actin. It is the major component of intranuclear and cytoplasmic actin rods.
<b>Tissue specificity</b>	Widely distributed in various tissues.
<b>Sequence similarities</b>	Belongs to the actin-binding proteins ADF family. Contains 1 ADF-H domain.
<b>Post-translational</b>	Phosphorylated on Ser-3 in resting cells.

## modifications

### Cellular localization

Nucleus matrix. Cytoplasm > cytoskeleton. Almost completely in nucleus in cells exposed to heat shock or 10% dimethyl sulfoxide.

## Images



**All lanes :** Anti-Cofilin (phospho S3) antibody [EPR24753-28] ([ab283500](#)) at 1/1000 dilution

**Lane 1 :** HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate (Untreated membrane)

**Lane 2 :** HeLa(human cervix adenocarcinoma epithelial cell), whole cell lysate (Phosphatase treated membrane)

Lysates/proteins at 10 µg per lane.

### Secondary

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

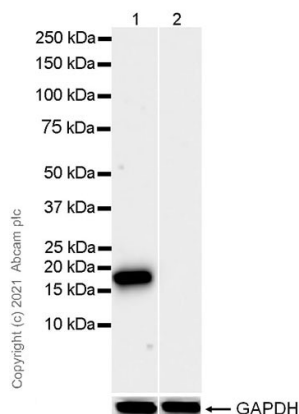
**Predicted band size:** 18 kDa

**Observed band size:** 18 kDa

This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: 37 seconds



Western blot - Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free (ab283513)

**All lanes :** Anti-Cofilin (phospho S3) antibody [EPR24753-28] ([ab283500](#)) at 1/1000 dilution

**Lane 1 :** 293T (human embryonic kidney epithelial cell), whole cell lysate (Untreated membrane)

**Lane 2 :** 293T (Phosphatase treated membrane)

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/50000 dilution

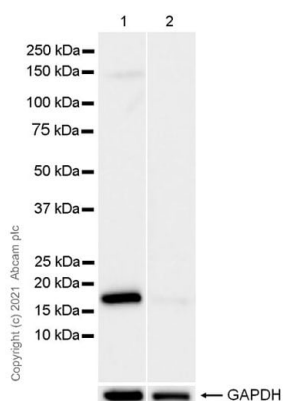
**Predicted band size:** 18 kDa

**Observed band size:** 18 kDa

This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: 15 seconds



Western blot - Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free (ab283513)

**All lanes :** Anti-Cofilin (phospho S3) antibody [EPR24753-28] ([ab283500](#)) at 1/1000 dilution

**Lane 1 :** NIH/3T3 (mouse embryonic fibroblast), whole cell lysate (Untreated membrane)

**Lane 2 :** NIH/3T3 (Phosphatase treated membrane)

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/50000 dilution

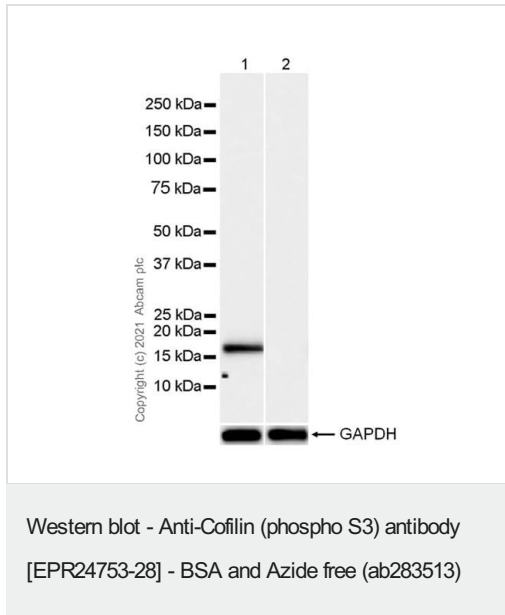
**Predicted band size:** 18 kDa

**Observed band size:** 18 kDa

**Exposure time:** 3 seconds

This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST



**All lanes :** Anti-Cofilin (phospho S3) antibody [EPR24753-28] ([ab283500](#)) at 1/1000 dilution

**Lane 1 :** C6 (rat glial tumor glial cell), whole cell lysate (Untreated membrane)

**Lane 2 :** C6 (Phosphatase treated membrane)

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/50000 dilution

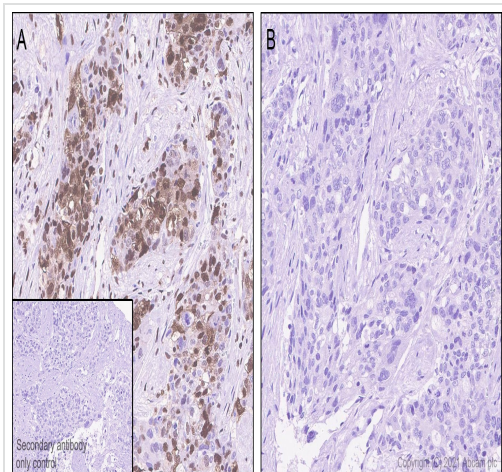
**Predicted band size:** 18 kDa

**Observed band size:** 18 kDa

This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: 10 seconds



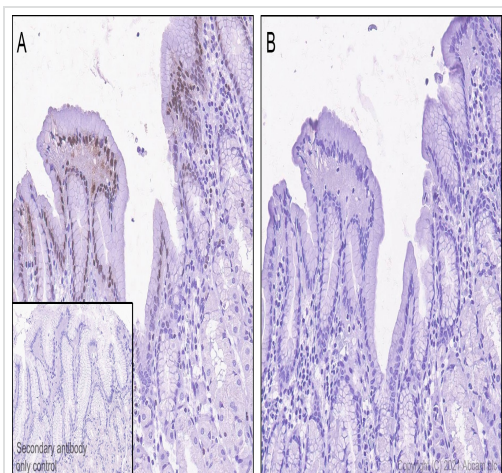
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free (ab283513)

This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labelling Cofilin (phospho S3) with [ab283500](#) at 1/5000 (0.121 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on human breast carcinoma without alkaline phosphatase treatment (image A). (PMID: 27799793) No signal was detected when tissues were treated with alkaline phosphatase (image B). The section was incubated with [ab283500](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free (ab283513)

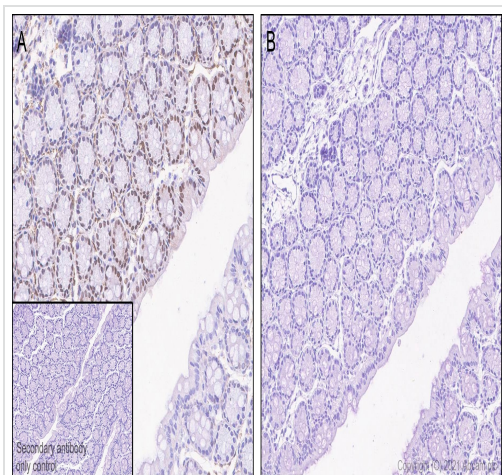
This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human stomach tissue labelling Cofilin (phospho S3) with [ab283500](#) at 1/5000 (0.121 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on human stomach without alkaline phosphatase treatment (image A). No signal was detected when tissues were treated with alkaline phosphatase (image B). The section was incubated with [ab283500](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins





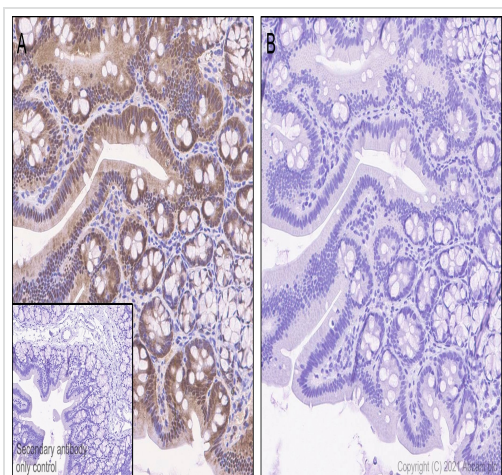
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free (ab283513)

This data was developed using **ab283500**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labelling Cofilin (phospho S3) with **ab283500** at 1/5000 (0.121 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on mouse colon without alkaline phosphatase treatment (image A). (PMID: 15649475) No signal was detected when tissues were treated with alkaline phosphatase (image B). The section was incubated with **ab283500** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



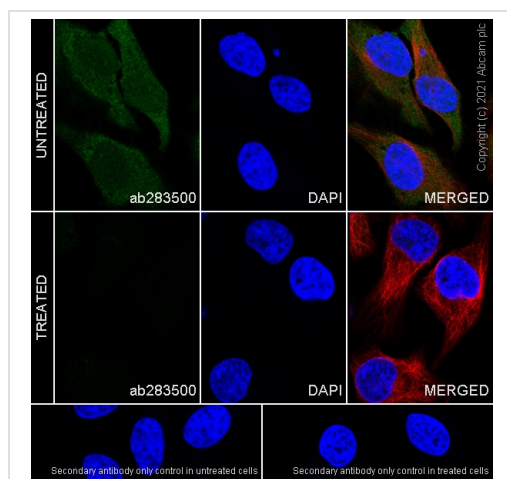
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free (ab283513)

This data was developed using **ab283500**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labelling Cofilin (phospho S3) with **ab283500** at 1/5000 (0.121 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on rat colon without alkaline phosphatase treatment (image A). No signal was detected when tissues were treated with alkaline phosphatase (image B). The section was incubated with **ab283500** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

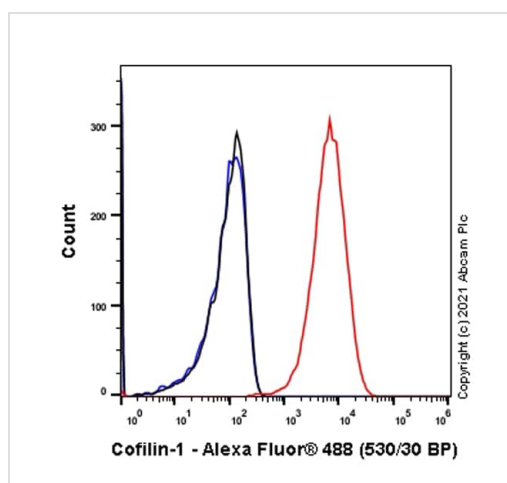


Immunocytochemistry/ Immunofluorescence - Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free (ab283513)

This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa cells labelling Cofilin (phospho S3) with [ab283500](#) at 1/1000 (0.604 ug/ml) dilution, followed by [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing nuclear and cytoplasmic staining in HeLa cells, no staining in HeLa treated with Alkaline Phosphatase (37°C) for 1 hour is observed. [ab195889](#) Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.

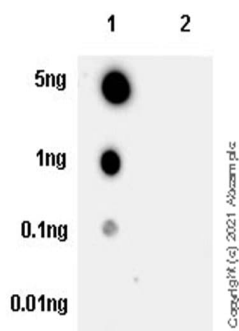


Flow Cytometry (Intracellular) - Anti-Cofilin (phospho S3) antibody [EPR24753-28] - BSA and Azide free (ab283513)

This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling Cofilin (phospho S3) with [ab283500](#) at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) at 1/2000 dilution was used as the secondary antibody.





Dot Blot - Anti-Cofilin (phospho S3) antibody  
[EPR24753-28] - BSA and Azide free (ab283513)

This data was developed using [ab283500](#), the same antibody clone in a different buffer formulation.

Dot blot analysis of Cofilin (phospho S3) using [ab283500](#) at 1/1000 (0.604 ug/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/100,000 dilution.

**Lane 1:** Cofilin-1 (phospho S3) peptide

**Lane 2:** Cofilin-1 non-phospho peptide

Exposure time: 3 minutes

Blocking and diluting 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-Cofilin (phospho S3) antibody [EPR24753-28] -  
BSA and Azide free (ab283513)

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

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