


## Product datasheet

# Anti-beta Actin antibody [SP124] - Cytoskeleton Marker ab115777

Recombinant RabMAb

★★★★★ 1 Abreviews 105 References 13 Images

### Overview

<b>Product name</b>	Anti-beta Actin antibody [SP124] - Cytoskeleton Marker
<b>Description</b>	Rabbit monoclonal [SP124] to beta Actin - Cytoskeleton Marker
<b>Host species</b>	Rabbit
<b>Specificity</b>	The immunogen used for this product shares 71% homology with Gamma actin/actin cytoplasmic 2 and 64% homology with cardiac, smooth, and skeletal muscle actin. Cross-reactivity with these proteins has not been confirmed experimentally.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF, Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Rabbit, Chicken, Cow, Dog, Pig 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human Placenta, Human placenta, Mouse placenta, and Rat placenta tissue; WB: Raji, HeLa, A549, HEK-293, NIH/3T3 and Raw 264.7 cell lystate; Flow Cyt (Intra): HeLa, NIH/3T3, and C6 cells; ICC/IF: NIH/3T3, and C6 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> . <b>This product is FOR RESEARCH USE ONLY. For commercial use, please contact <a href="mailto:partnerships@abcam.com">partnerships@abcam.com</a>.</b>

### 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: 7.60 Preservative: 0.1% Sodium azide

	Constituents: PBS, 1% BSA
<b>Purity</b>	Protein A/G purified
<b>Purification notes</b>	Purified from TCS by protein A/G.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	SP124
<b>Isotype</b>	IgG

## Applications

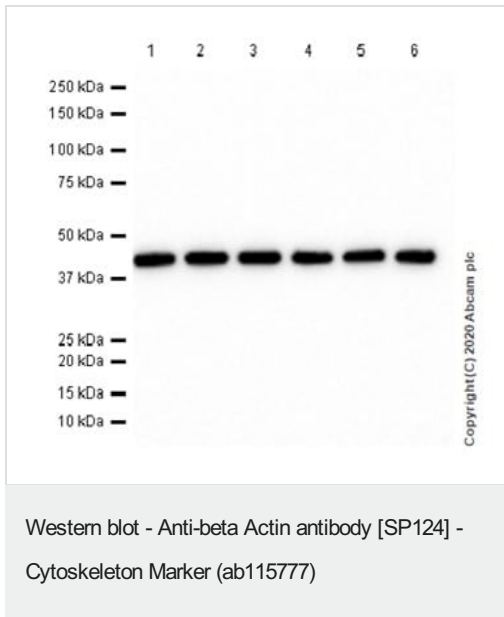
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab115777 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>	★★★★★ (1)	1/200. Predicted molecular weight: 42 kDa.
<b>IHC-P</b>		1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at room temperature for 20 min.
<b>ICC/IF</b>		1/50.
<b>Flow Cyt (Intra)</b>		1/200. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

## Target

<b>Function</b>	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
<b>Involvement in disease</b>	Defects in ACTB are a cause of dystonia juvenile-onset (DYTJ) [MIM:607371]. DYTJ is a form of dystonia with juvenile onset. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYTJ patients manifest progressive, generalized, dopa-unresponsive dystonia, developmental malformations and sensory hearing loss.
<b>Sequence similarities</b>	Belongs to the actin family.
<b>Post-translational modifications</b>	ISGylated.
<b>Cellular localization</b>	Cytoplasm > cytoskeleton. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

## Images



**All lanes** : Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777) at 1/200 dilution

**Lane 1** : Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

**Lane 2** : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

**Lane 3** : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

**Lane 4** : A549 (Human lung carcinoma epithelial cell) whole cell lysate

**Lane 5** : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate

**Lane 6** : RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

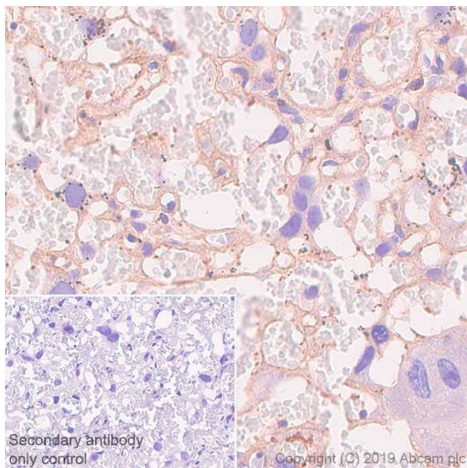
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 42 kDa

**Observed band size:** 42 kDa

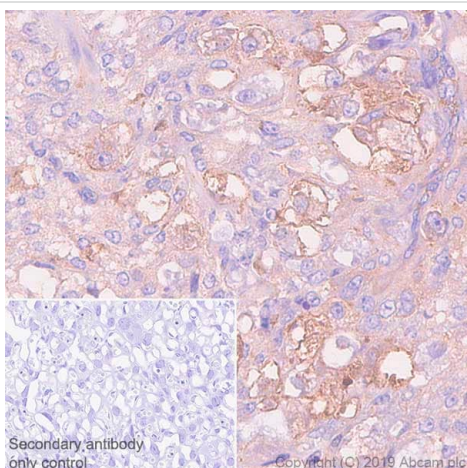
**Exposure time:** 10 seconds

Blocking/Diluting buffer and concentration 5% NFDm/TBST



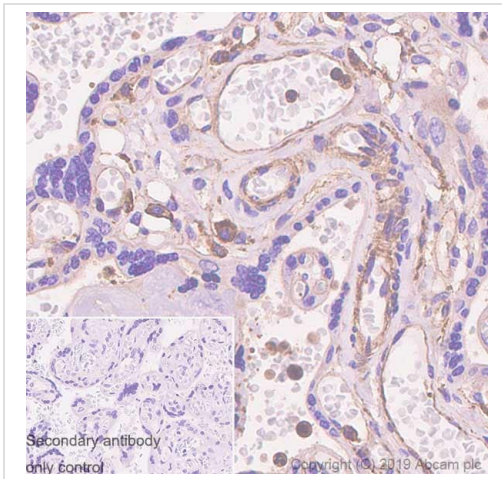
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat placenta tissue sections labeling beta Actin with ab115777 at 1/100 dilution. Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with citrate sodium buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)



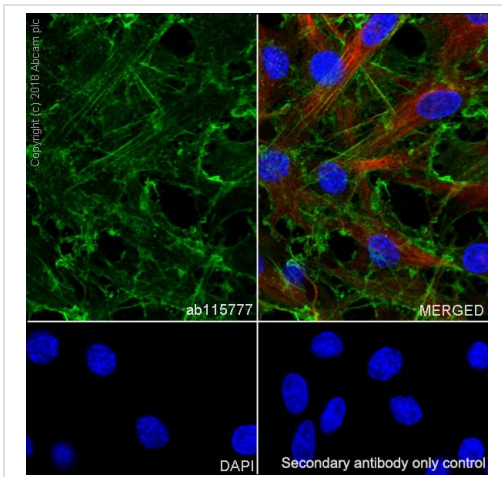
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse placenta tissue sections labeling beta Actin with ab115777 at 1/200 dilution. Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with citrate sodium buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)



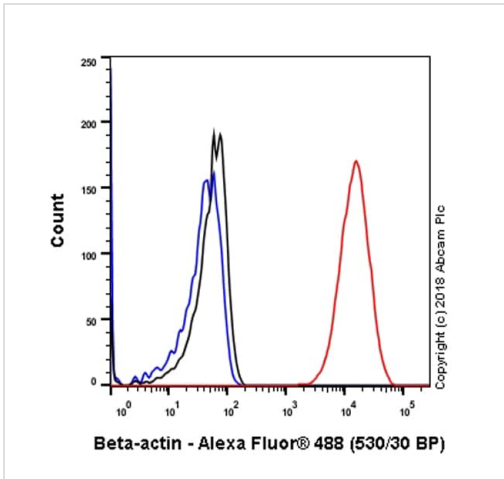
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human placenta tissue sections labeling beta Actin with ab115777 at 1/200 dilution. Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with citrate sodium buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



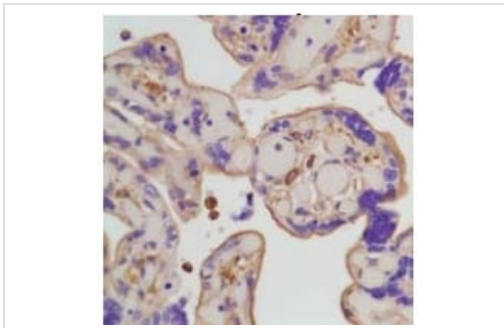
Immunocytochemistry/ Immunofluorescence - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)

Immunocytochemistry/ Immunofluorescence analysis of C6 (rat glial tumor glial cell) cells labeling beta Actin with purified ab115777 at 1/50 dilution. 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). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



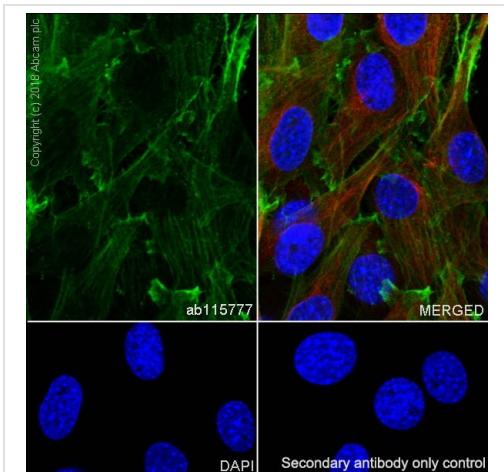
Flow Cytometry (Intracellular) - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)

Flow Cytometry analysis of C6 (rat glial tumor glial cell) cells labeling beta Actin with purified ab115777 at 1/200 - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150081](#)) was used as the secondary antibody. Isotype control - Rabbit monoclonal IgG ([ab172730](#)) - Black. Unlabeled control - Blue.



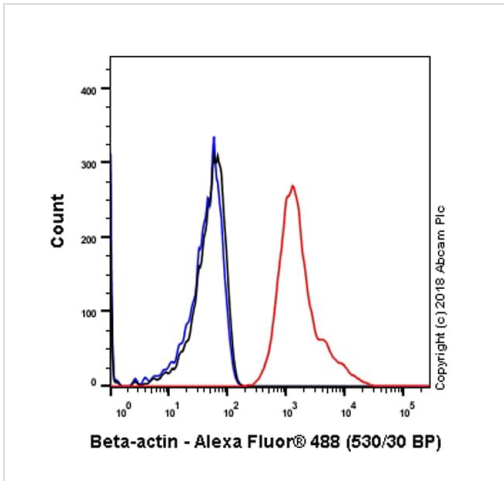
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)

Staining of Human beta Actin in a Formalin/PFA-fixed paraffin-embedded section of Human Placenta using ab115777 at a dilution of 1/200.



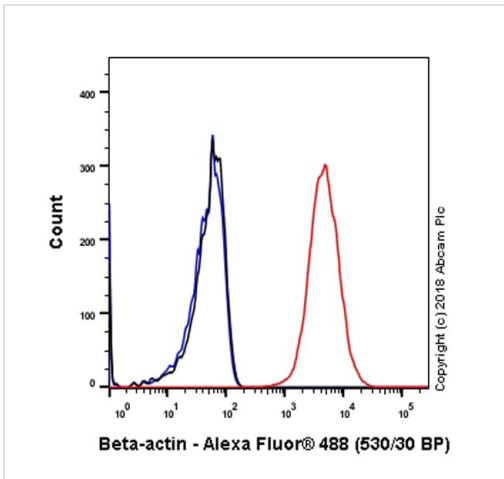
Immunocytochemistry/ Immunofluorescence - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)

Immunocytochemistry/ Immunofluorescence analysis of NIH/3T3 (mouse embryonic fibroblast) cells labeling beta Actin with purified ab115777 at 1/50 dilution. 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). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



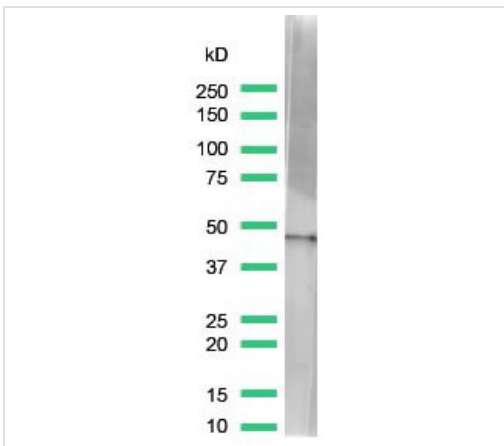
Flow Cytometry analysis of NIH/3T3 (mouse embryonic fibroblast) cells labeling beta Actin with purified ab115777 at 1/200 - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150081](#)) was used secondary antibody. Isotype control - Rabbit monoclonal IgG ([ab172730](#)) - Black. Unlabeled control - Blue.

Flow Cytometry (Intracellular) - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)



Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling beta Actin with purified ab115777 at 1/200 - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150081](#)) was used as the secondary antibody. Isotype control - Rabbit monoclonal IgG ([ab172730](#)) - Black. Unlabeled control - Blue.

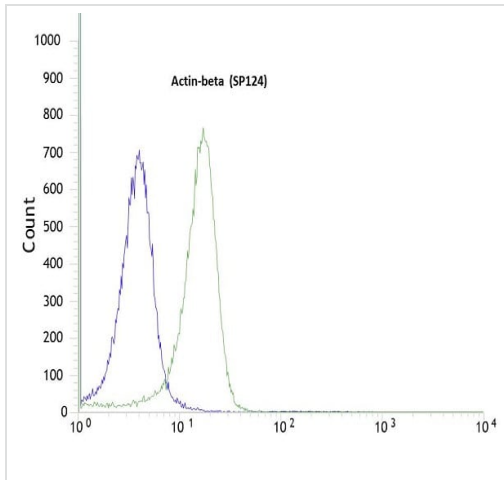
Flow Cytometry (Intracellular) - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)



Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777) at 1/200 dilution + Raji cell lystate

**Predicted band size: 42 kDa**





Western blot - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)



Flow cytometric analysis of rabbit anti-beta Actin (SP124) antibody ab115777 (1/200) in HeLa cells (green) compared to negative control of rabbit IgG (blue)

Flow Cytometry (Intracellular) - Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-beta Actin antibody [SP124] - Cytoskeleton Marker (ab115777)

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