

Product datasheet

Anti-F-actin antibody [4E3.ad1] ab130935

[21 References](#) [3 Images](#)

Overview

Product name	Anti-F-actin antibody [4E3.ad1]
Description	Mouse monoclonal [4E3.ad1] to F-actin
Host species	Mouse
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF
Species reactivity	Reacts with: Mouse, Human
Immunogen	corresponding to F-actin. Database link: P68139
Positive control	This antibody gave a positive signal in the following lysates: Human Skeletal Muscle Tissue; Mouse Skeletal Muscle Tissue; Mouse Heart Tissue; HeLa Whole Cell; C2C12 Whole Cell. This antibody gave a positive result in IF in the following Methanol fixed cell line: HeLa.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: 99% PBS
Purity	Concentrated Culture Supernatant
Clonality	Monoclonal

Clone number	4E3.adl
Isotype	IgM

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab130935 in the following tested applications.

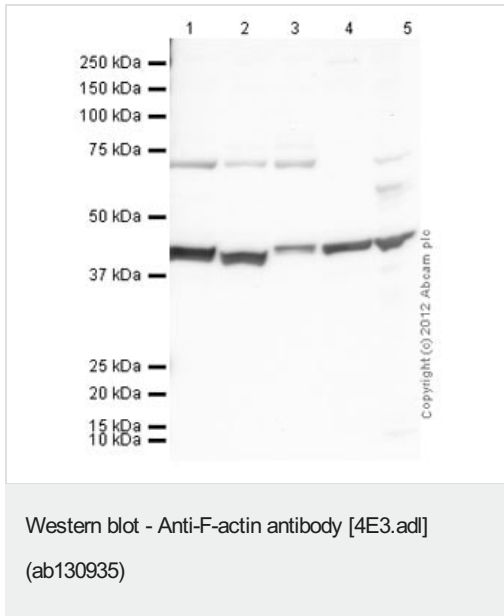
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use 0.1-1 µg for 10 ⁶ cells. ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.
WB		1/500. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa). Abcam recommends blocking with 3% Milk
ICC/IF		Use a concentration of 5 µg/ml.

Target

Function	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
Involvement in disease	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.
Sequence similarities	Belongs to the actin family.
Post-translational modifications	ISGylated.
Cellular localization	Cytoplasm > cytoskeleton. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

Images



All lanes : Anti-F-actin antibody [4E3.adl] (ab130935) at 1/500 dilution

Lane 1 : Human skeletal muscle tissue lysate - total protein
([ab29330](#))

Lane 2 : Skeletal Muscle (Mouse) Tissue Lysate

Lane 3 : Heart (Mouse) Tissue Lysate

Lane 4 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 5 : C2C12 (Mouse myoblast cell line) Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Peroxidase- conjugated AffiniPure Goat Anti-mouse IgM
([ab98112](#)) at 1/3000 dilution

Developed using the ECL technique.

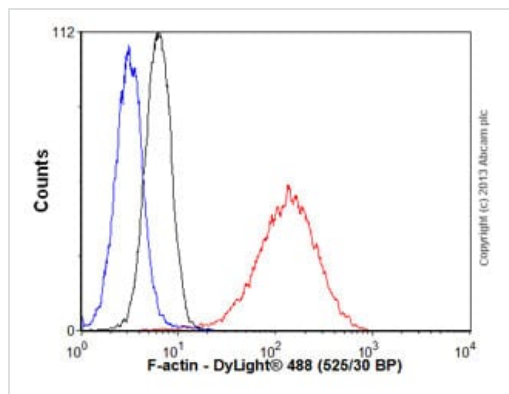
Performed under reducing conditions.

Predicted band size: 42 kDa

Observed band size: 42 kDa

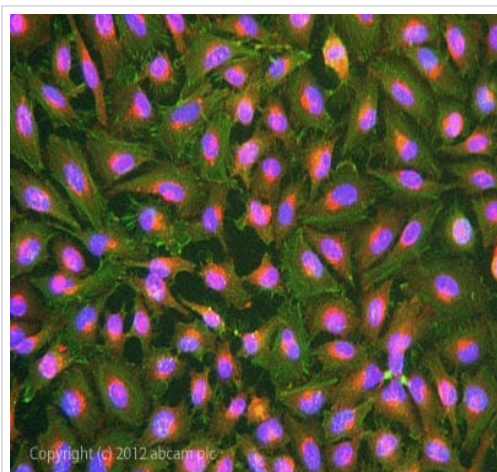
Additional bands at: 60 kDa, 70 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 10 seconds



Flow Cytometry (Intracellular) - Anti-F-actin antibody
[4E3.adl] (ab130935)

Overlay histogram showing HeLa cells stained with ab130935 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab130935, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was a goat **anti-mouse DyLight® 488** (IgM; mu chain) (**ab97007**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgM [ICIGM] (**ab91545**, 1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 20 min used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Anti-F-actin antibody [4E3.adl] (ab130935)

ab130935 stained HeLa cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab130935 at 5µg/ml overnight at +4°C. The secondary antibody (green) was a goat **anti-mouse DyLight® 488** (**ab96879**) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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 <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

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