


Product datasheet

Anti-Arp2 antibody ab47654

★★★★☆ [3 Abreviews](#) [19 References](#) [3 Images](#)

Overview

Product name	Anti-Arp2 antibody
Description	Rabbit polyclonal to Arp2
Host species	Rabbit
Specificity	Replenishment batches of our polyclonal antibody, ab47654 are tested in WB. Previous batches were additionally validated in ICC/IF and IP. These applications are still expected to work and are covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, ab129018 .
Tested applications	Suitable for: IP, WB, ICC/IF
Species reactivity	Reacts with: Mouse, Human, Xenopus laevis Predicted to work with: Rat, Chicken, Cow, Orangutan 
Immunogen	Synthetic peptide corresponding to Human Arp2 aa 350 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as ab47653)
Positive control	This antibody gave a positive signal in the following whole cell lysates; HeLa (Human epithelial carcinoma cell line), Jurkat (Human T cell lymphoblast-like cell line), A431 (Human epithelial carcinoma cell line), HEK293 (Human embryonic kidney cell line), HepG2 (Human hepatocellular liver carcinoma cell line), MCF7 (Human breast adenocarcinoma cell line), and SHSY-5Y (Human neuroblastoma cell line).
General notes	<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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40
Preservative: 0.02% Sodium azide
Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab47654 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
IP	★★★★☆ (1)	Use at an assay dependent concentration.
WB	★★★★☆ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 45 kDa (predicted molecular weight: 45 kDa).
ICC/IF		Use a concentration of 1 µg/ml.

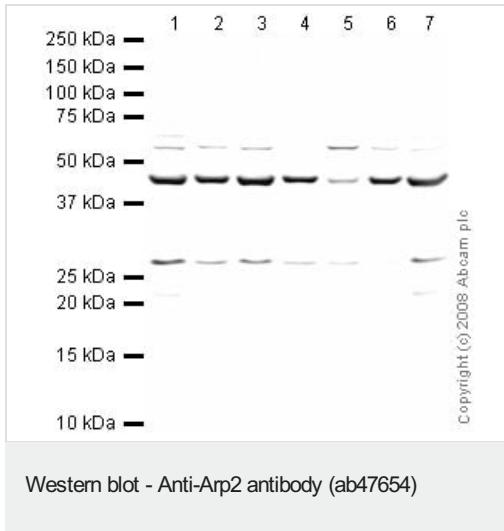
Target

Function Functions as ATP-binding component of the Arp2/3 complex which is involved in regulation of actin polymerization and together with an activating nucleation-promoting factor (NPF) mediates the formation of branched actin networks. Seems to contact the pointed end of the daughter actin filament.

Sequence similarities Belongs to the actin family. ARP2 subfamily.

Cellular localization Cytoplasm > cytoskeleton. Cell projection.

Images



All lanes : Anti-Arp2 antibody (ab47654) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 3 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 4 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lane 5 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 6 : MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

Lane 7 : SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

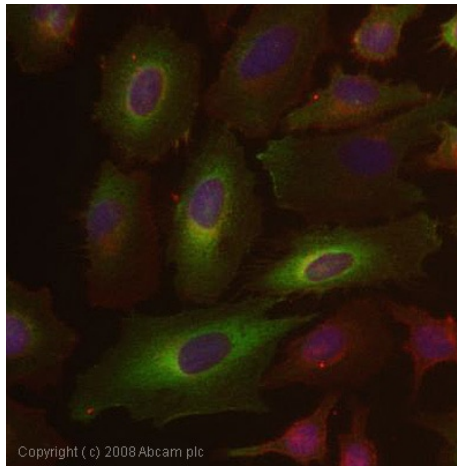
All lanes : IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 45 kDa

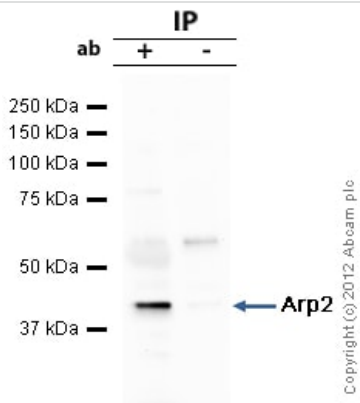
Observed band size: 45 kDa

Additional bands at: 27 kDa, 60 kDa. We are unsure as to the identity of these extra bands.



Immunocytochemistry/ Immunofluorescence - Anti-Arp2 antibody (ab47654)

ICC/IF image of ab47654 stained human HeLa cells. The cells were methanol fixed (5 min), permeabilised in 0.1% PBS-Tween (20 min) and incubated with the antibody (ab47654, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive IF result in HEK 293, HepG2 and MCF7 cells.



Immunoprecipitation - Anti-Arp2 antibody (ab47654)

Arp2 was immunoprecipitated using 0.5mg Hek293 whole cell extract, 5µg of Rabbit polyclonal to Arp2 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-). The antibody was incubated under agitation with Protein G beads for 10min, Hek293 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab47654.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) ([ab99697](#)).

Band: 45kDa: Arp2.

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