

Product datasheet

Anti-ARPC5/p16 ARC antibody [EP1551Y] ab51243

KO VALIDATED

Recombinant

RabMAb

★★★★★ [5 Abreviews](#) [9 References](#) [9 Images](#)

Overview

Product name	Anti-ARPC5/p16 ARC antibody [EP1551Y]
Description	Rabbit monoclonal [EP1551Y] to ARPC5/p16 ARC
Host species	Rabbit
Specificity	This antibody is specific to the p16 ARC protein, database link: O15511 . There is no observed cross reactivity to the CDKN2A/p16INK4a protein.
Tested applications	Suitable for: ICC/IF, IP, WB, IHC-P Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal, mouse and rat brain tissue lysates and HeLa, HepG2, SKBR-3 and MCF-7 cell lysates. IHC-P: Human uterus adenocarcinoma and spleen tissues. ICC/IF: Neuro-2a cells. IP: Human fetal brain tissue lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EP1551Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab51243 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

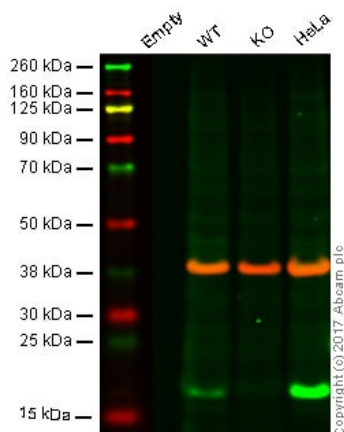
Application	Abreviews	Notes
ICC/IF		1/50 - 1/100.
IP		1/20 - 1/70.
WB	★★★★★ (5)	1/1000 - 1/10000. Detects a band of approximately 16 kDa (predicted molecular weight: 16 kDa).
IHC-P		1/50. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols . We have obtained results that indicate IHC-P is unsuitable for mouse and rat species.

Application notes Is unsuitable for Flow Cyt.

Target

Function	Functions as 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.
Sequence similarities	Belongs to the ARPC5 family.
Cellular localization	Cytoplasm > cytoskeleton. Cell projection.

Images



Western blot - Anti-p16 ARC antibody [EP1551Y]
(ab51243)

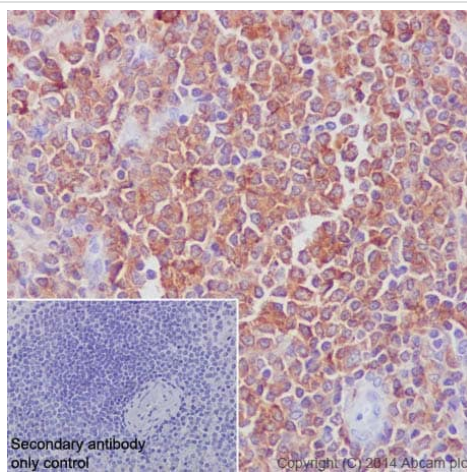
Lane 1: Wild type HAP1 whole cell lysate (20 µg)

Lane 2: p16 ARC knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

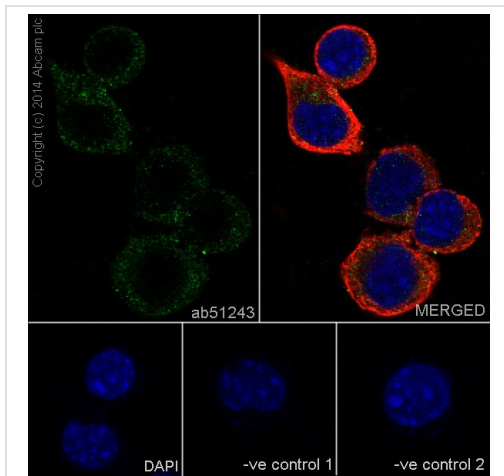
Lanes 1 - 4: Merged signal (red and green). Green - ab51243 observed at 16 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab51243 was shown to specifically react with p16 ARC when p16 ARC knockout samples were used. Wild-type and p16 ARC knockout samples were subjected to SDS-PAGE. Ab51243 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p16 ARC antibody [EP1551Y] (ab51243)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human spleen tissue labelling p16 ARC with purified ab51243 at a dilution of 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

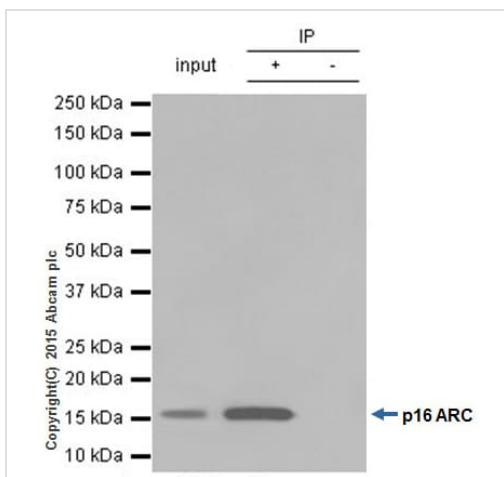


Immunocytochemistry/ Immunofluorescence - Anti-p16 ARC antibody [EP1551Y] (ab51243)

Immunocytochemistry/Immunofluorescence analysis of Neuro-2a cells labelling p16 ARC with purified ab51243 at a dilution of 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).



Immunoprecipitation - Anti-p16 ARC antibody [EP1551Y] (ab51243)

ab51243 (purified) at a dilution of 1/20 immunoprecipitating p16 ARC in human fetal brain tissue lysate.

Lane 1 (input): Human fetal brain tissue lysate (10µg)

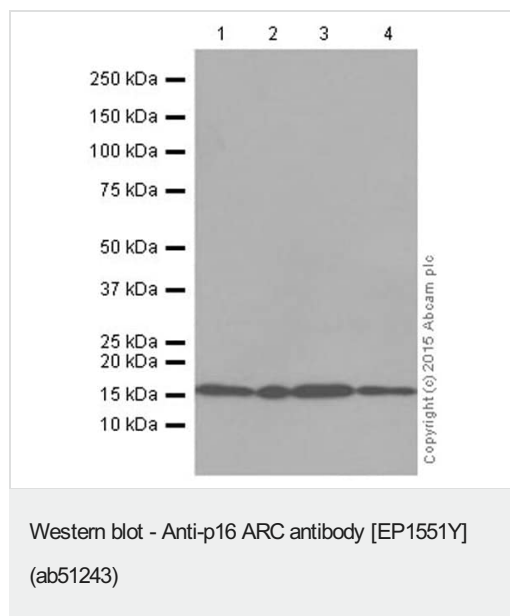
Lane 2 (+): ab51243 + human fetal brain tissue lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab51243 in human fetal brain tissue lysate.

For western blotting, a HRP-conjugated anti-rabbit specific to the non-reduced form of IgG was used as the secondary antibody (1/1500).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



All lanes : Anti-ARPC5/p16 ARC antibody [EP1551Y] (ab51243) at 1/5000 dilution (purified)

Lane 1 : HeLa whole cell lysate

Lane 2 : SKBR-3 whole cell lysate

Lane 3 : MCF-7 whole cell lysate

Lane 4 : HepG2 whole cell lysate

Lysates/proteins at 20 µg per lane.

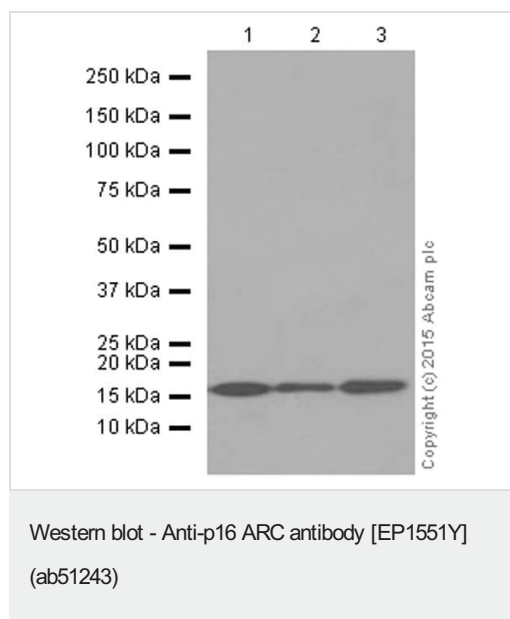
Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 16 kDa

Observed band size: 16 kDa

Blocking and dilution buffer: 5% NFDM/TBST



All lanes : Anti-ARPC5/p16 ARC antibody [EP1551Y] (ab51243) at 1/5000 dilution (purified)

Lane 1 : Human fetal brain tissue lysate

Lane 2 : Mouse brain tissue lysate

Lane 3 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

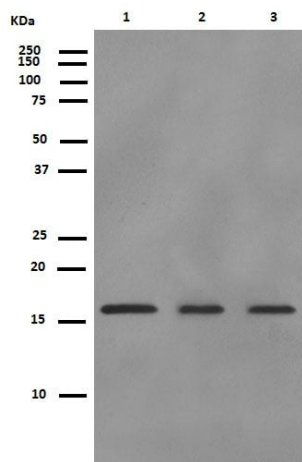
Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 16 kDa

Observed band size: 16 kDa

Blocking and dilution buffer: 5% NFDM/TBST



Western blot - Anti-p16 ARC antibody [EP1551Y] (ab51243)

All lanes : Anti-ARPC5/p16 ARC antibody [EP1551Y] (ab51243) at 1/2000 dilution (unpurified)

Lane 1 : Human fetal brain tissue lysate

Lane 2 : Mouse brain tissue lysate

Lane 3 : Rat brain tissue lysate

Lysates/proteins at 10 µg per lane.

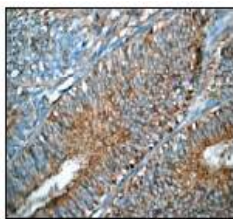
Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 16 kDa

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p16 ARC antibody [EP1551Y] (ab51243)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human uterus adenocarcinoma tissue labelling p16 ARC with unpurified ab51243 at a dilution of 1/50.

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-p16 ARC antibody [EP1551Y] (ab51243)

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

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