

# p16-ARC (FL-151): sc-68393

## BACKGROUND

The Arp2/3 (actin-related protein 2/3) complex consists of seven subunits, all of which are actin-related proteins. The complex is involved in the control of actin polymerization and in mediating the formation of branched actin networks. p16-ARC, also known as ARPC5 (actin-related protein 2/3 complex subunit 5) or ARC16 (Arp2/3 complex 16 kDa subunit), is a 151 amino acid subunit of the Arp2/3 complex. Thought to play a role in maintaining the integrity of Arp2/3, p16-ARC is a substrate for MAPKAPK-2, which, through phosphorylation of p16-ARC, may participate in Arp2/3 regulatory functions and remodeling of the actin cytoskeleton. Two isoforms of p16-ARC exist due to alternative splicing events.

## REFERENCES

1. Welch, M.D., et al. 1997. The human Arp2/3 complex is composed of evolutionarily conserved subunits and is localized to cellular regions of dynamic Actin filament assembly. *J. Cell Biol.* 138: 375-384.
2. Machesky, L.M., et al. 1997. Mammalian Actin-related protein 2/3 complex localizes to regions of lamelli-podial protrusion and is composed of evolutionarily conserved proteins. *Biochem. J.* 328: 105-112.

## CHROMOSOMAL LOCATION

Genetic locus: ARPC5 (human) mapping to 1q25.3; Arpc5 (mouse) mapping to 1 A3.

## SOURCE

p16-ARC (FL-151) is a rabbit polyclonal antibody raised against amino acids 1-151 representing full length p16-ARC of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

p16-ARC (FL-151) is recommended for detection of p16-ARC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p16-ARC (FL-151) is also recommended for detection of p16-ARC in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for p16-ARC siRNA (h): sc-62733, p16-ARC siRNA (m): sc-62734, p16-ARC shRNA Plasmid (h): sc-62733-SH, p16-ARC shRNA Plasmid (m): sc-62734-SH, p16-ARC shRNA (h) Lentiviral Particles: sc-62733-V and p16-ARC shRNA (m) Lentiviral Particles: sc-62734-V.

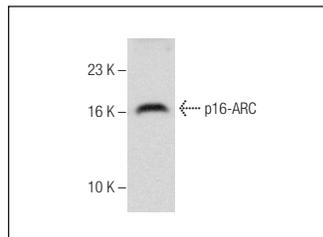
Molecular Weight of p16-ARC: 16 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



p16-ARC (FL-151): sc-68393. Western blot analysis of p16-ARC expression in HL-60 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Nie, X., et al. 2015. 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin induces premature senescence of astrocytes via WNT/β-catenin signaling and ROS production. *J. Appl. Toxicol.* 35: 851-860.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



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Try **p16-ARC (C-3): sc-166760**, our highly recommended monoclonal alternative to p16-ARC (FL-151).