

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.

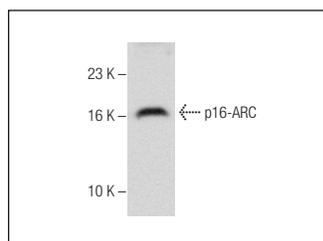
Molecular Weight of p16-ARC: 16 kDa.

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 or our catalog for detailed protocols and support products.



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