

p21-ARC (FL-178): sc-68396

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. p21-ARC, also known as ARPC3 (Actin-related protein 2/3 complex subunit 3) or ARC21 (Arp2/3 complex 21 kDa subunit), is a 178 amino acid Actin-binding component of Arp2/3. Localized to the cytoplasm and cytoskeleton, p21-ARC is thought to interact with p20-ARC and play an important role in the structural integrity of the protein complex.

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. Goldberg, D.J., et al. 2000. Recruitment of the Arp2/3 complex and Mena for the stimulation of Actin polymerization in growth cones by nerve growth factor. *J. Neurosci. Res.* 60: 458-467.

CHROMOSOMAL LOCATION

Genetic locus: ARPC3 (human) mapping to 12q24.11; Arpc3 (mouse) mapping to 5 F.

SOURCE

p21-ARC (FL-178) is a rabbit polyclonal antibody raised against amino acids 1-178 representing full length p21-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

p21-ARC (FL-178) is recommended for detection of p21-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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p21-ARC (FL-178) is also recommended for detection of p21-ARC in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for p21-ARC siRNA (h): sc-62731, p21-ARC siRNA (m): sc-62732, p21-ARC shRNA Plasmid (h): sc-62731-SH, p21-ARC shRNA Plasmid (m): sc-62732-SH, p21-ARC shRNA (h) Lentiviral Particles: sc-62731-V and p21-ARC shRNA (m) Lentiviral Particles: sc-62732-V.

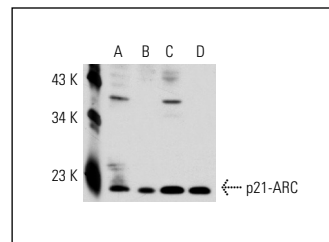
Molecular Weight of p21-ARC: 21 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, K-562 whole cell lysate: sc-2203 or MCF7 whole cell lysate: sc-2206.

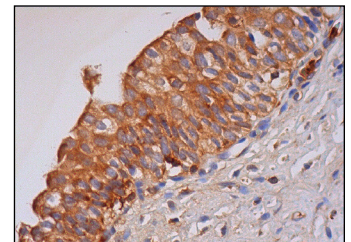
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



p21-ARC (FL-178): sc-68396. Western blot analysis of p21-ARC expression in K-562 (A), 3T3-L1 (B), MCF7 (C) and SK-BR-3 (D) whole cell lysates.



p21-ARC (FL-178): sc-68396. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic staining of urothelial cells.

SELECT PRODUCT CITATIONS

1. Liao, G., et al. 2011. Mis-localization of Arp2 mRNA impairs persistence of directional cell migration. *Exp. Cell Res.* 317: 812-822.

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
Satisfation
Guaranteed

Try **p21-ARC (E-7): sc-166630** or **p21-ARC (26): sc-136020**, our highly recommended monoclonal alternatives to p21-ARC (FL-178).