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.

CHROMOSOMAL LOCATION

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

SOURCE

p21-ARC (E-7) is a mouse monoclonal antibody raised against amino acids 1-178 representing full length p21-ARC of human origin.

PRODUCT

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p21-ARC (E-7) is available conjugated to agarose (sc-166630 AC, 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166630 HRP), 200 µg/ml for WB, IHCP) and ELISA; to either phycoerythrin (sc-166630 PE), fluorescein (sc-166630 FITC), Alexa Fluor® 488 (sc-166630 AF488), Alexa Fluor® 546 (sc-166630 AF546), Alexa Fluor® 594 (sc-166630 AF594) or Alexa Fluor® 647 (sc-166630 AF647), 200 µg/ml for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-166630 AF680) or Alexa Fluor® 790 (sc-166630 AF790), 200 µg/ml for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

p21-ARC (E-7) is recommended for detection of p21-ARC of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 (E-7) is also recommended for detection of p21-ARC in additional species, including equine, canine, bovine and porcine.


Molecular Weight of p21-ARC: 21 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, NIH/3T3 whole cell lysate: sc-2210 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ HRP: sc-516102 or m-IgGκ HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

SELECT PRODUCT CITATIONS


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 for detailed protocols and support products.