p16-ARC (C-3): sc-166760

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.

CHROMOSOMAL LOCATION

Genetic locus: ARPC5 (human) mapping to 1q25.3; Arpc5 (mouse) mapping to 16 Q3.

SOURCE

p16-ARC (C-3) is a mouse monoclonal antibody raised against amino acids 1-151 representing full length p16-ARC of human origin.

PRODUCT

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

p16-ARC (C-3) is available conjugated to agarose (sc-166760 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166760 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166760 PE), fluorescein (sc-166760 FITC), Alexa Fluor® 488 (sc-166760 AF488), Alexa Fluor® 546 (sc-166760 AF546), Alexa Fluor® 594 (sc-166760 AF594) or Alexa Fluor® 647 (sc-166760 AF647), 200 µg/ml, for WB (RGB), IHC and FCM; and to either Alexa Fluor® 680 (sc-166760 AF680) or Alexa Fluor® 790 (sc-166760 AF790), 200 µg/ml, for Near-Infrared (NIR) WB and FCM.

STORAGE

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

APPLICATIONS

p16-ARC (C-3) is recommended for detection of p16-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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of p16-ARC: 16 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or HT-1080 whole cell lysate: sc-2000 or HT-1080 whole cell lysate: sc-364183.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG B-HRP: sc-516102 or m-IgG BP-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 Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

![Western blot analysis of p16-ARC expression in HeLa (A), Hep G2 (B), U-87 MG (C), HL-60 (D), HT-1080 (E) and DU 145 (F) whole cell lysates. Detection reagent used: m-IgG B-HRP: sc-516102.](image)

![Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic and membrane localization.](image)

SELECT PRODUCT CITATIONS


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.

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