p41-ARCb (H-1): sc-271342

**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. The p41 subunit of Arp2/3 exists in multiple versions which arise due to posttranslational modifications and vary in function depending on cell type or developmental stage. p41-ARCb, also known as ARPC1B [Actin-related protein 2/3 complex subunit 1B] or ARC41 (Arp2/3 complex 41 kDa subunit), is a 372 amino acid version of the p41 subunit of the Arp2/3 complex. Localized to the cytoplasm and cytoskeleton, p41-ARCb is involved in regulating the assembly and maintenance of the complex and, unlike the other Arp2/3 subunits, is not primarily involved in Actin polymerization.

**CHROMOSOMAL LOCATION**

Genetic locus: ARPC1B (human) mapping to 7q22.1; Arpc1b (mouse) mapping to 5 G2.

**SOURCE**

p41-ARCb (H-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 278-314 within an internal region of p41-ARCb of human origin.

**PRODUCT**

Each vial contains 200 μg IgG\(\kappa\) kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.2% stabilizer protein.

Blocking peptide available for competition studies, sc-271342 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**RESEARCH USE**

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

**APPLICATIONS**

- p41-ARCb (H-1) is recommended for detection of p41-ARCb 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).
- p41-ARCb (H-1) is also recommended for detection of p41-ARCb in additional species, including canine, bovine, porcine and avian.
- Suitable for use as control antibody for p41-ARCb siRNA (h): sc-62745, p41-ARCb siRNA (m): sc-62746, p41-ARCb shRNA Plasmid (h): sc-62745-SH, p41-ARCb shRNA Plasmid (m): sc-62746-SH, p41-ARCb shRNA (h) Lentiviral Particles: sc-62745-V and p41-ARCb shRNA (m) Lentiviral Particles: sc-62746-V.
- Molecular Weight of p41-ARCb: 41 kDa.
- Positive Controls: HeLa whole cell lysate: sc-2200, HEK293 whole cell lysate: sc-45136 or Hep G2 cell lysate: sc-2227.

**RECOMMENDED SUPPORT REAGENTS**

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

1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgGc 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 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-IgGc BP-FITC: sc-516140 or m-IgGc BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

![Western blot analysis of p41-ARCb expression in M11](Image)

**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.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.