

# p41-ARCb (m2): 293T Lysate: sc-122325

## 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.

## REFERENCES

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2. Zhao, X., Yang, Z., Qian, M. and Zhu, X. 2001. Interactions among subunits of human Arp2/3 complex: p20-ARC as the hub. *Biochem. Biophys. Res. Commun.* 280: 513-517.
3. Kaneda, A., Kaminishi, M., Nakanishi, Y., Sugimura, T. and Ushijima, T. 2002. Reduced expression of the Insulin-induced protein 1 and p41 Arp2/3 complex genes in human gastric cancers. *Int. J. Cancer* 100: 57-62.
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6. Kumagai, K., Nimura, Y., Mizota, A., Miyahara, N., Aoki, M., Furusawa, Y., Takiguchi, M., Yamamoto, S. and Seki, N. 2006. Arpc1b gene is a candidate prediction marker for choroidal malignant melanomas sensitive to radiotherapy. *Invest. Ophthalmol. Vis. Sci.* 47: 2300-2304.

## CHROMOSOMAL LOCATION

Genetic locus: Arpc1b (mouse) mapping to 5 G2.

## PRODUCT

p41-ARCb (m2): 293T Lysate represents a lysate of mouse p41-ARCb transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## APPLICATIONS

p41-ARCb (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive p41-ARCb antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

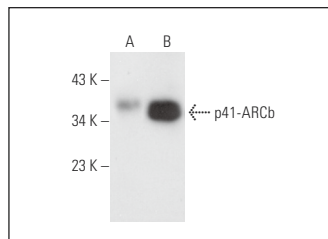
p41-ARCb (C-3): sc-137125 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse p41-ARCb expression in p41-ARCb transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

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

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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.

## DATA



p41-ARCb (C-3): sc-137125. Western blot analysis of p41-ARCb expression in non-transfected: sc-117752 (A) and mouse p41-ARCb transfected: sc-122325 (B) 293T whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.