10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Arpc1b/p41-Arc (C-terminal region) Antibody

Catalog # AN1642

Specification

Anti-Arpc1b/p41-Arc (C-terminal region) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	O15143
Reactivity	**Bovine, Chicken**
Host	**Rabbit**
Clonality	**Rabbit Polyclonal**
Isotype	**IgG**
Calculated MW	**40950**

Anti-Arpc1b/p41-Arc (C-terminal region) Antibody - Additional Information

Gene ID	**10095**

Other Names
Arc41, p41, Arpc1b

Target/Specificity
Cellular morphology, adhesion, and motility occur through dynamic reorganization of actin-based superstructures. Actin-binding proteins are critical for regulating actin polymerization and superstructure formation. The Arp2/3 complex is an actin polymerization-inducing complex that includes Arp2, Arp3, p41-Arc, p34-Arc, p21-Arc, p20-Arc, and p16-Arc. Several nucleation promoting factors, such as WASP and coronin, regulate the activity of the Arp2/3 complex. In addition, the Arp2/3 complex may be regulated by phosphorylation of specific subunits in the complex. p41-Arc (Arpc1b) subunit Arpc1 has two isoforms in humans, Arpc1a and Arpc1b. PAK1 can bind and phosphorylate Thr-21 in Arpc1b leading to growth factor-stimulated cell motility. In addition, Arpc1b colocalizes with γ-tubulin at centrosomes and stimulates Aurora A activity. Aurora A phosphorylates Arpc1b on Thr-21 and a nonphosphorylatable Arpc1b mutant cannot activate Aurora A kinase and centrosome amplification. Thus, Arpc1b has roles in cytoskeletal dynamics during cell motility and mitosis, and these activities are regulated by phosphorylation at Thr-21

Dilution
WB~~1:1000
IHC~~1:100~500

Format
Antigen Affinity Purified

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Arpc1b/p41-Arc (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

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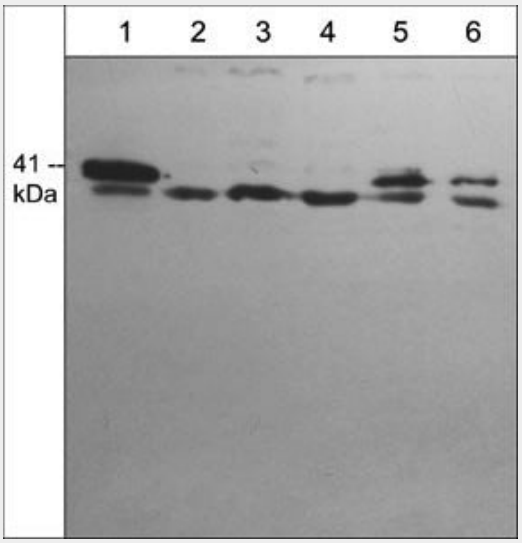
Anti-Arpc1b/p41-Arc (C-terminal region) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Arpc1b/p41-Arc (C-terminal region) Antibody - Images



Western blot of rat A7r5 (lane 1), human Jurkat (lane 2), rat PC12 (lane 3), human PC3 (lane 4), mouse C2C12 (lane 5), and human A431 cells (lane 6). The blot was probed with rabbit polyclonal anti-Arpc1b (C-terminal region).

Anti-Arpc1b/p41-Arc (C-terminal region) Antibody - Background

Cellular morphology, adhesion, and motility occur through dynamic reorganization of actin-based superstructures. Actin-binding proteins are critical for regulating actin polymerization and superstructure formation. The Arp2/3 complex is an actin polymerization-inducing complex that includes Arp2, Arp3, p41-Arc, p34-Arc, p21-Arc, p20-Arc, and p16-Arc. Several nucleation promoting factors, such as WASP and coronin, regulate the activity of the Arp2/3 complex. In addition, the Arp2/3 complex may be regulated by phosphorylation of specific subunits in the complex. p41-Arc (Arpc1b) subunit Arpc1 has two isoforms in humans, Arpc1a and Arpc1b. PAK1 can bind and phosphorylate Thr-21 in Arpc1b leading to growth factor-stimulated cell motility. In addition, Arpc1b colocalizes with γ-tubulin at centrosomes and stimulates Aurora A activity. Aurora A phosphorylates Arpc1b on Thr-21 and a nonphosphorylatable Arpc1b mutant cannot activate Aurora A kinase and centrosome amplification. Thus, Arpc1b has roles in cytoskeletal dynamics during cell motility and mitosis, and these activities are regulated by phosphorylation at Thr-21