

Anti-Arp3 (C-terminal region) Antibody

Catalog # AN1641

Specification

Anti-Arp3 (C-terminal region) Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC <u>P61158</u> Bovine, Chicken, Drosophila, C.Elegans Rabbit Rabbit Polyclonal IgG 47371

Anti-Arp3 (C-terminal region) Antibody - Additional Information

Gene ID Other Names ACTR3, Arp3 10096

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. Arp2 has two phosphosites, Thr-237 and Thr-238, that are evolutionarily conserved, and are phosphorylated along with Tyr-202 in response to growth factor stimulation. These phosphorylation events may regulate binding to the pointed end of actin filaments, and alanine substitutions of these Arp2 phosphosites inhibit membrane protrusions. Thus, phosphorylation may be another mode of Arp2/3 complex regulation in addition to the activity of nucleation-promoting factors.

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-Arp3 (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice



Anti-Arp3 (C-terminal region) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Arp3 (C-terminal region) Antibody - Images



Western blot of human A431 (lane 1), Jurkat (lane 2), and HeLa (lane 3) cells. The blots were probed with rabbit polyclonal anti-Arp3 (C-terminal region) antibody at 1:1000 (lanes 1-3).



Immunocytochemical labeling of Arp3 in aldehyde-fixed and NP-40-permeabilized rat PC12 cells differentiated with NGF. The cells were labeled with rabbit polyclonal anti-Arp3 (C-terminal region) (AP4581) in the absence (left) or presence (right) of blocking peptide (AX4585). The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

Anti-Arp3 (C-terminal region) Antibody - Background

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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. Arp2 has two phosphosites, Thr-237 and Thr-238, that are evolutionarily conserved, and are phosphorylated along with Tyr-202 in response to growth factor stimulation. These phosphorylation events may regulate binding to the pointed end of actin filaments, and alanine substitutions of these Arp2 phosphosites inhibit membrane protrusions. Thus, phosphorylation may be another mode of Arp2/3 complex regulation in addition to the activity of nucleation-promoting factors.