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phospho-ARP3 (Ser418) Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59095

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	P61158
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthesised phosphopeptide derived from human ARP3 around the phosphorylation site of Ser418
Epitope Specificity	VM(p-S)
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SUBCELLULAR LOCATION	Cytoplasm, cytoskeleton. Cell projection.
SIMILARITY	Belongs to the actin family. ARP3 subfamily.
SUBUNIT	Component of the Arp2/3 complex composed of ARP2, ARP3, ARPC1B/p41-ARC, ARPC2/p34-ARC, ARPC3/p21-ARC, ARPC4/p20-ARC and ARPC5/p16-ARC. Interacts with WHDC1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Actin polymerization is required for a variety of cell functions, including chemotaxis, cell migration, cell adhesion, and platelet activation. Cells trigger actin polymerization through either the de novo nucleation of filaments from monomeric actin, the severing of existing filaments to create uncapped barbed ends, or the uncapping existing barbed ends. The nucleation of actin is a rate-limiting and unfavorable reaction in actin polymerization and therefore requires the involvement of the Arp2/3 complex, which helps create new filaments and promotes the end-to-side cross-linking of actin filaments into the branching meshwork. The Arp2/3 complex consists of the actin-related proteins Arp2 and Arp3, and various other accessory proteins. The Arp2/3 complex promotes actin nucleation by binding the pointed end of actin filaments, or by associating with the side of an existing filament, and nucleates growth in the barbed direction. In addition, the Arp2/3 complex also mediates actin cytoskeletal outgrowths that are regulated by the Rho family of small GTPases. In response to GTP-binding Cdc42, the Arp2/3 complex binds the Cdc42 substrates, namely the WASP proteins, and initiates the formation of lamellipodia and filopodia.

Additional Information

Other Names	Actin-related protein 3, Actin-like protein 3, ACTR3, ARP3

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information