

Rabbit Anti-phospho-ARP3 (Ser418) antibody

SL8999R

Product Name:	phospho-ARP3 (Ser418)
Chinese Name:	磷酸化Cytoskeleton肌动蛋白样蛋白3抗体
Alias:	ARP3 (phospho-Ser418); ARP3 (phospho S418); Actin-like protein 3; Actin-related protein 3; ACTR3; ARP3 actin-related protein 3 homolog; ARP3 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	47kDa
Cellular localization:	cytoplasmic 2
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human ARP3 around the phosphorylation site of Ser418:VM(p-S)
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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 actinrelated 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.

Function:

The Arp2/3 complex involved in Golgi polerization in NIH3T3 cells. In a different model it has been shown that the Arp2/3 complex is necessary for neutrophil chemotaxis and phagocytosis.

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.

Subcellular Location: Cytoplasm, cytoskeleton. Cell projection.

Similarity: Belongs to the actin family. ARP3 subfamily.

SWISS: P61158

Gene ID: 10096

Database links:

Entrez Gene: 10096Human

<u>Omim: 604222</u>Human

SwissProt: P61158Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.