

**Arp3 Polyclonal Antibody**  
**Catalog # AP68519****Specification**

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**Arp3 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P61158</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**Arp3 Polyclonal Antibody - Additional Information****Gene ID** 10096**Other Names**

ACTR3; ARP3; Actin-related protein 3; Actin-like protein 3

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Arp3 Polyclonal Antibody - Protein Information****Name** ACTR3**Synonyms** ARP3**Function**

ATP-binding component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF) (PubMed:<a href="http://www.uniprot.org/citations/9000076" target="\_blank">9000076</a>). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:<a href="http://www.uniprot.org/citations/9000076" target="\_blank">9000076</a>). Seems to contact the pointed end of the daughter actin filament (PubMed:<a href="http://www.uniprot.org/citations/9000076" target="\_blank">9000076</a>). In podocytes, required for the formation of lamellipodia downstream of AVIL and PLCE1 regulation (PubMed:<a href="http://www.uniprot.org/citations/29058690" target="\_blank">29058690</a>). In addition to its role in the cytoplasmic cytoskeleton, the Arp2/3 complex also promotes actin polymerization in the nucleus, thereby regulating gene transcription and repair of damaged DNA (PubMed:<a href="http://www.uniprot.org/citations/17220302" target="\_blank">17220302</a>, PubMed:<a href="http://www.uniprot.org/citations/29925947" target="\_blank">29925947</a>). The Arp2/3 complex promotes homologous recombination (HR) repair in response to DNA damage

by promoting nuclear actin polymerization, leading to drive motility of double-strand breaks (DSBs) (PubMed:<a href="http://www.uniprot.org/citations/29925947" target="\_blank">29925947</a>). Plays a role in ciliogenesis (PubMed:<a href="http://www.uniprot.org/citations/20393563" target="\_blank">20393563</a>).

#### Cellular Location

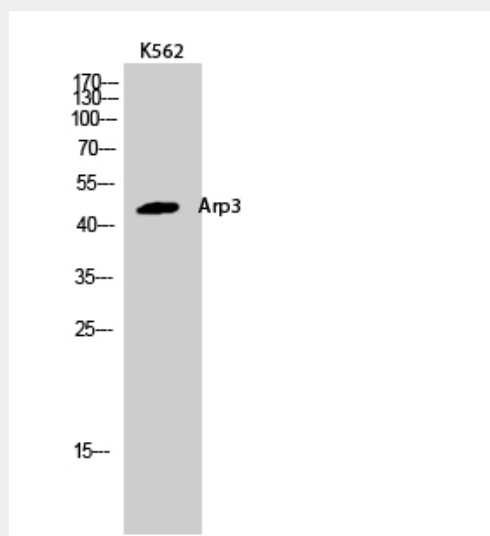
Cytoplasm, cytoskeleton. Cell projection. Nucleus. Note=In pre- apoptotic cells, colocalizes with MEKV in large specks (pyroptosomes) (PubMed:19109554)

### Arp3 Polyclonal 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 Cytometry](#)
- [Cell Culture](#)

### Arp3 Polyclonal Antibody - Images



### Arp3 Polyclonal Antibody - Background

ATP-binding component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF) (PubMed:9000076). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:9000076). Seems to contact the pointed end of the daughter actin filament (PubMed:9000076). In addition to its role in the cytoplasmic cytoskeleton, the Arp2/3 complex also promotes actin polymerization in the nucleus, thereby regulating gene transcription and repair of damaged DNA (PubMed:17220302, PubMed:29925947). The Arp2/3 complex promotes homologous recombination (HR) repair in response to DNA damage by promoting nuclear actin polymerization, leading to drive motility of double- strand breaks (DSBs) (PubMed:29925947). Plays

a role in ciliogenesis (PubMed:20393563).