

# ARP3 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP50961

## Product Information

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Application	WB
Primary Accession	<a href="#">P61158</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47371

## Additional Information

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Gene ID	10096
Other Names	Actin-related protein 3, Actin-like protein 3, ACTR3, ARP3
Target/Specificity	KLH conjugated synthetic peptide derived from human ARP3
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

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Name	ACTR3
Synonyms	ARP3
Function	<p>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="#">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="#">9000076</a>). Seems to contact the pointed end of the daughter actin filament (PubMed:<a href="#">9000076</a>). In podocytes, required for the formation of lamellipodia downstream of AVIL and PLCE1 regulation (PubMed:<a href="#">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="#">17220302</a>, PubMed:<a href="#">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="#">29925947</a>). Plays a role in ciliogenesis (PubMed:<a href="#">20393563</a>).</p>

## Cellular Location

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

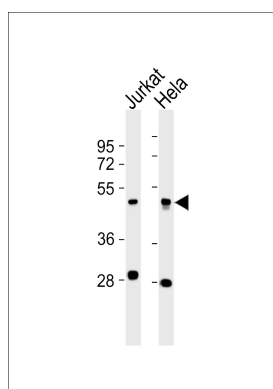
## Background

Functions as ATP-binding component of the Arp2/3 complex which is involved in regulation of actin polymerization and together with an activating nucleation-promoting factor (NPF) mediates the formation of branched actin networks. Seems to contact the pointed end of the daughter actin filament. Plays a role in ciliogenesis.

## References

Welch M.D.,et al.J. Cell Biol. 138:375-384(1997).  
Szelei J.,et al.Submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Hillier L.W.,et al.Nature 434:724-731(2005).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

## Images



All lanes : Anti-ARP3 Antibody at 1:1000 dilution Lane 1: Jurkat whole cell lysates Lane 2: HeLa whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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