

Anti-ARP3 Antibody

Catalog # AP95647

Product Information

Application	WB, IHC, FC
Primary Accession	P61158
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	47371

Additional Information

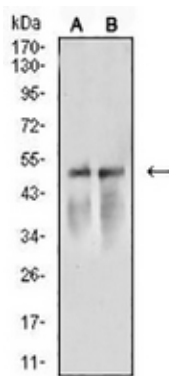
Gene ID	10096
Other Names	ARP3; Actin-related protein 3; Actin-like protein 3
Target/Specificity	Recombinant fusion protein of human ARP3 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200)
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

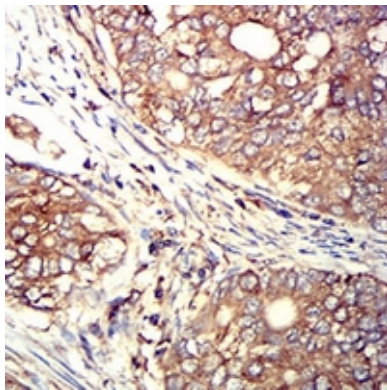
Name	ACTR3
Synonyms	ARP3
Function	ATP-binding component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF) (PubMed:9000076). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:9000076). Seems to contact the pointed end of the daughter actin filament (PubMed:9000076). In podocytes, required for the formation of lamellipodia downstream of AVIL and PLCE1 regulation (PubMed:29058690). 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).
Cellular Location	Cytoplasm, cytoskeleton. Cell projection. Nucleus. Note=In pre- apoptotic

cells, colocalizes with MEFV in large specks (pyroptosomes)
(PubMed:19109554)

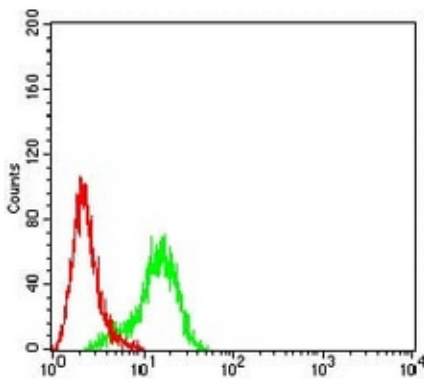
Images



Western blot analysis of ARP3 expression in NIH/3T3 (A), A549 (B) whole cell lysates. (Predicted band size: 47 kD; Observed band size: 47 kD)



Immunohistochemical analysis of ARP3 staining in human cervical cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of HeLa cells using Anti-ARP3 Antibody (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.