

Arp3 Rabbit mAb

Catalog # AP75104

Product Information

Application	WB, IHC-P, FC
Primary Accession	P61158
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	47371

Additional Information

Gene ID	10096
Other Names	ACTR3
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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](#)).

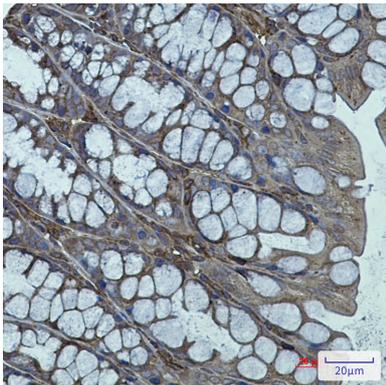
Cellular Location

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

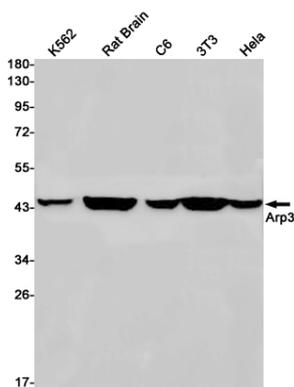
Background

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

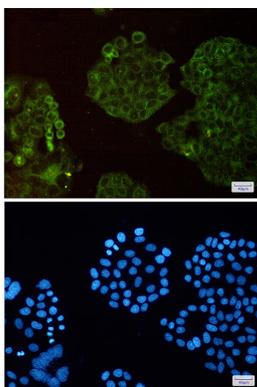
Images



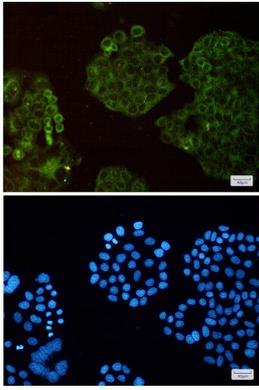
Immunohistochemistry analysis of paraffin-embedded mouse colon using Actin Related Protein 3 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



Western blot analysis of Arp3 in K562, rat Brain, C6, 3T3, HeLa lysates using Arp3 antibody.



Immunocytochemistry analysis of Arp3 (green) in HeLa cells using Arp3 antibody, and DAPI (blue)



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