

KD-Validated Anti-Arp3 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI2347

Product Information

Application	WB, FC, ICC
Primary Accession	P61158
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB615
Calculated MW	47371
Gene Name	ACTR3
Aliases	ACTR3; Actin Related Protein 3; ARP3; ARP3 Actin Related Protein 3 Homolog; Actin-Related Protein 3; Actin-Like Protein 3; ARP3 (Actin-Related Protein 3, Yeast) Homolog; ARP3 Actin-Related Protein 3 Homolog (Yeast)
Immunogen	A synthesized peptide derived from human ACTR3

Additional Information

Gene ID	10096
Other Names	Actin-related protein 3, Actin-like protein 3, ACTR3, ARP3

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)

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