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KD-Validated Anti-Arp2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2297

Product Information

Application	WB, FC, ICC
Primary Accession	P61160
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB610
Calculated MW	44761
Gene Name	ACTR2
Aliases	ACTR2; Actin Related Protein 2; ARP2; ARP2 Actin Related Protein 2 Homolog; Actin-Related Protein 2; Actin-Like Protein 2; ARP2 (Actin-Related Protein 2, Yeast) Homolog; ARP2 Actin-Related Protein 2 Homolog (Yeast)
Immunogen	A synthesized peptide derived from human Arp2

Additional Information

Gene ID	10097
Other Names	Actin-related protein 2, Actin-like protein 2, ACTR2, ARP2

Protein Information

Name	ACTR2
Synonyms	ARP2
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).
Cellular Location	Cytoplasm, cytoskeleton. Cell projection. Nucleus

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