

# Actin Related Protein 2 Rabbit mAb

Catalog # AP78403

#### **Product Information**

**Application** WB, IHC-P, IF, ICC

Primary Accession P61160

**Reactivity** Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human Arp2

**Purification** Affinity Purified

Calculated MW 44761

### **Additional Information**

**Gene ID** 10097

Other Names ACTR2

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

### **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

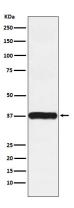
recombination (HR) repair in response to DNA damage by promoting nuclear

actin polymerization, leading to drive motility of double-strand breaks (DSBs) (PubMed: 29925947).

## **Cellular Location**

Cytoplasm, cytoskeleton. Cell projection. Nucleus

## **Images**



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