

**ACTR3 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2891b****Specification**

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**ACTR3 Antibody (C-term) - Product Information**

Application	FC, IHC-P, WB,E
Primary Accession	<a href="#">P61158</a>
Other Accession	<a href="#">Q4V7C7</a> , <a href="#">Q99JY9</a> , <a href="#">Q90WD0</a> , <a href="#">P61157</a> , <a href="#">Q801P7</a> , <a href="#">A0A1L8EV45</a>
Reactivity	Human
Predicted	Xenopus, Bovine, Chicken, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	47371
Antigen Region	380-407

**ACTR3 Antibody (C-term) - Additional Information****Gene ID** 10096**Other Names**

Actin-related protein 3, Actin-like protein 3, ACTR3, ARP3

**Target/Specificity**

This ACTR3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 380-407 amino acids from the C-terminal region of human ACTR3.

**Dilution**

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ACTR3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ACTR3 Antibody (C-term) - 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](#)).

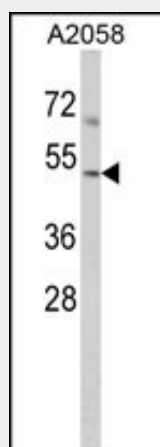
**Cellular Location**

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

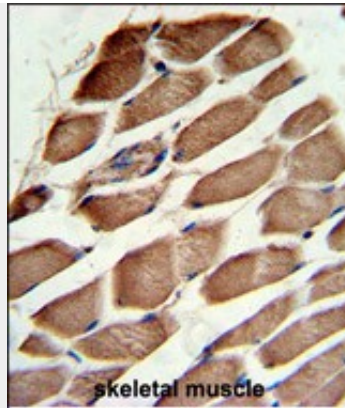
**ACTR3 Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

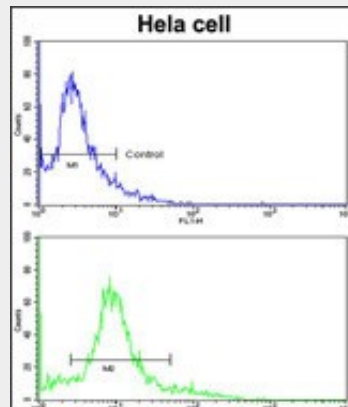
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**ACTR3 Antibody (C-term) - Images**

Western blot analysis of ACTR3 Antibody (C-term) (Cat. #AP2891b) in A2058 cell line lysates (35ug/lane). ACTR3 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human skeletal muscle reacted with ACTR3 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of HeLa cells using ACTR3 Antibody (C-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **ACTR3 Antibody (C-term) - Background**

ACTR3 is known to be a major constituent of the ARP2/3 complex. This complex is located at the cell surface and is essential to cell shape and motility through lamellipodial actin assembly and protrusion.

### **ACTR3 Antibody (C-term) - References**

Weisswange, I., et. al., Nature 458 (7234), 87-91 (2009)