10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACTR3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2891b

Specification

ACTR3 Antibody (C-term) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	P61158
Other Accession	Q4V7C7, Q99JY9, Q90WD0, P61157, Q801P7, A0A1L8EV45
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

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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).

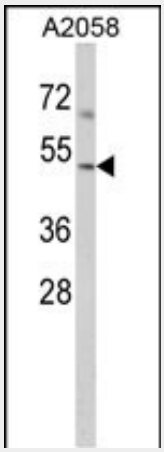
Cellular Location
Cytoplasm, cytoskeleton. Cell projection. Nucleus. Note=In pre- apoptotic cells, colocalizes with MEFV in large specks (pyroptosomes) (PubMed:19109554)

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 Cytomety
- 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.

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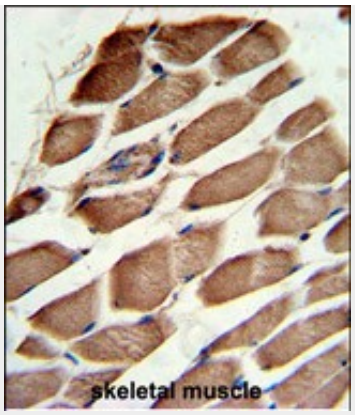
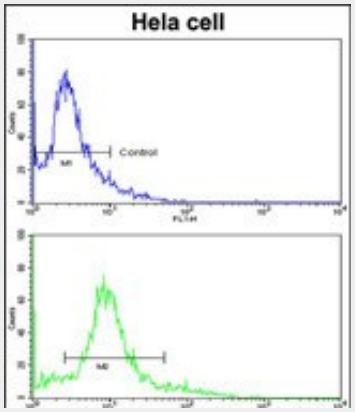


Formalin-fixed and paraffin-embedded human skeletal muscle reacted with ACTR3 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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)