

For Research Use Only

# ACTA1-Specific Polyclonal antibody

Catalog Number: 17521-1-AP

13 Publications



## Basic Information

### Catalog Number:

17521-1-AP

### Size:

150ul, Concentration: 260 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_001100

### GeneID (NCBI):

58

### UNIPROT ID:

P68133

### Full Name:

actin, alpha 1, skeletal muscle

### Calculated MW:

42 kDa

### Observed MW:

39-42 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:2000

IHC: 1:50-1:500

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

**WB**: human skeletal muscle tissue, mouse skeletal muscle tissue, rat skeletal muscle tissue

**IHC**: human skeletal muscle tissue, human hysterosarcoma tissue

**FC (Intra)**: C2C12 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. The ACTA1 gene encodes skeletal muscle alpha-actin, the principal actin isoform in adult skeletal muscle, which interacts with a variety of proteins to produce the force for muscle contraction. There is only the N-terminal 8 amino acids difference among the actin family members. This antibody is specific to the ACTA1. It does not cross-react with other actin isoforms.

## Notable Publications

Author	Pubmed ID	Journal	Application
Hongyi Zhou	34502418	Int J Mol Sci	WB
Qing Wang	34786834	J Cell Mol Med	WB
Yongqiang Ai	34149411	Front Pharmacol	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1% BSA**

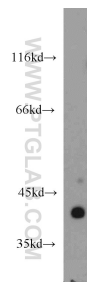
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

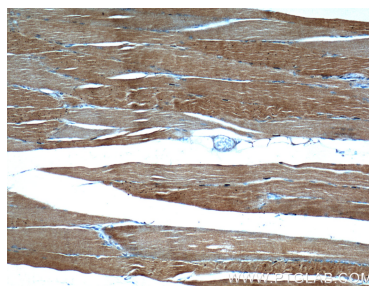
E: proteintech@ptglab.com  
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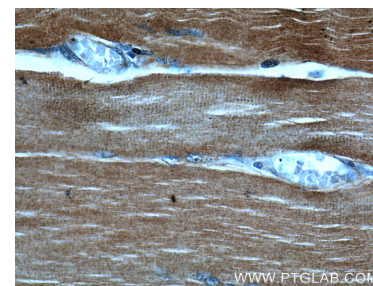
## Selected Validation Data



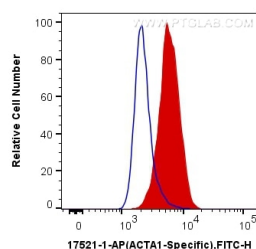
human skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 17521-1-AP (ACTA1-Specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 17521-1-AP (ACTA1-Specific Antibody) at dilution of 1:500 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 17521-1-AP (ACTA1-Specific Antibody) at dilution of 1:500 (under 40x lens).



1X10<sup>6</sup> C2C12 cells were intracellularly stained with 0.4 ug Anti-Human ACTA1-Specific (17521-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).