### For Research Use Only

# ACTA1-Specific Polyclonal antibody

Catalog Number: 17521-1-AP

10 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

17521-1-AP NM\_001100 Size: Genel D (NCBI):

150ul , Concentration: 260 µg/ml by 58

Nanodrop;

Source: actin, alpha 1, skeletal muscle

Rabbit Calculated MW:
Isotype: 42 kDa
IgG Observed MW:

39-42 kDa

**Applications** 

Tested Applications: FC, IHC, WB, ELISA

Cited Applications:

IF, WB

Species Specificity: human, mouse, rat Cited Species:

human, rat, mouse

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

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

**Purification Method:** 

WB 1:500-1:2000 IHC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

IHC: human skeletal muscle tissue, human

hysteromyoma tissue

# **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-termninal 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

## **Selected Validation Data**



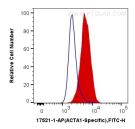
human skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 17521-1-AP (ACTA1-Specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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



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



1X10^6 C2C12 cells were intracellularly stained with 0.4 ug Anti-Human ACTA1-Specific (17521-1-AP) and CoraLite® 488-Conjugated AffiniPure 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).