For Research Use Only

ACTA1-Specific Polyclonal antibody

Catalog Number: 17521-1-AP

11 Publications



Basic Information

Catalog Number: 17521-1-AP Size:

260 μg/ml

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

Applications

Tested Applications:

WB, IHC, FC (Intra), ELISA

Cited Applications:

WB. IF

Species Specificity: human, mouse, rat Cited Species:

human, mouse, rat

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

 ${\sf IHC:} human\, skeletal\, muscle\, tissue, human\,$

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

Selected Validation Data



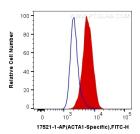
human skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 17521-1-AP (ACTA1-Specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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 I gG(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).