

**Anti-Actin Antibody**  
Catalog # ABO12749**Specification**

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**Anti-Actin Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P68133</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Actin, alpha skeletal muscle(ACTA1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Actin Antibody - Additional Information****Gene ID 58****Other Names**

Actin, alpha skeletal muscle, Alpha-actin-1, ACTA1, ACTA

**Calculated MW**

42051 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Cytoplasm, cytoskeleton.

**Protein Name**

Actin, alpha skeletal muscle

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Actin (359-377aa ITKQEYDEAGPSIVHRKCF), identical to the related mouse and rat sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

### Anti-Actin Antibody - Protein Information

**Name** ACTA1

**Synonyms** ACTA

#### Function

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

#### Cellular Location

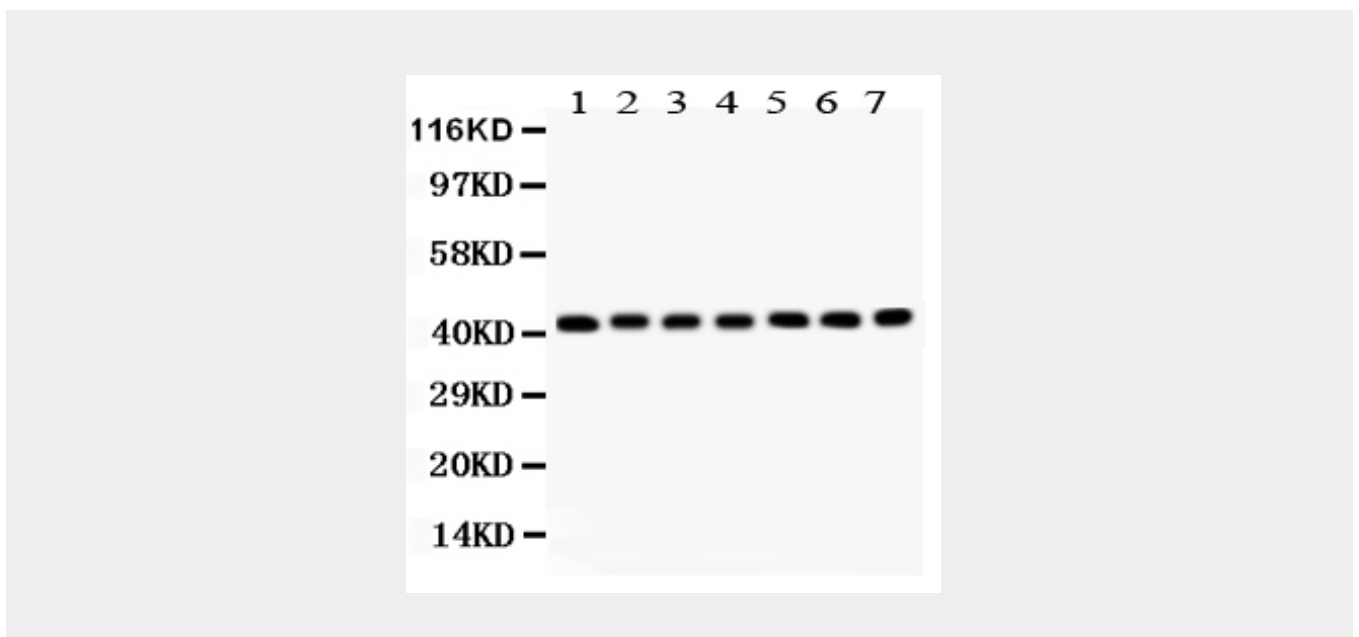
Cytoplasm, cytoskeleton.

### Anti-Actin Antibody - Protocols

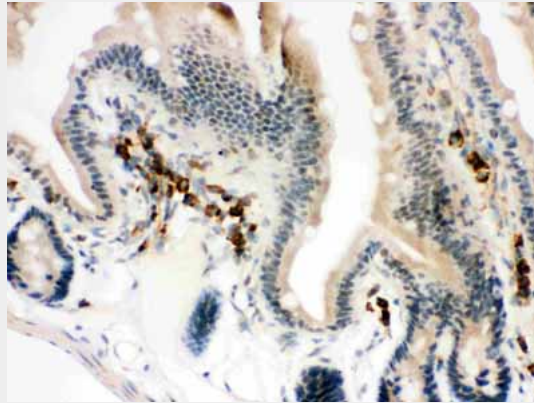
Provided below are standard protocols that you may find useful for product applications.

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

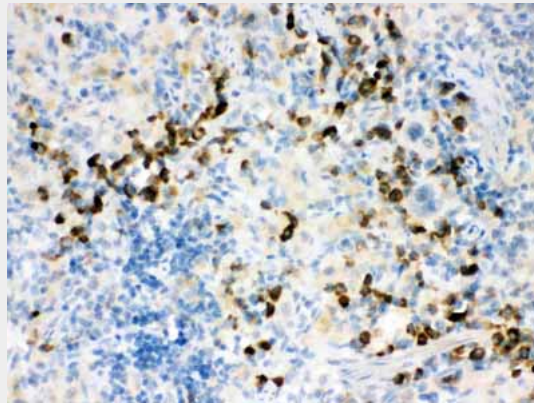
### Anti-Actin Antibody - Images



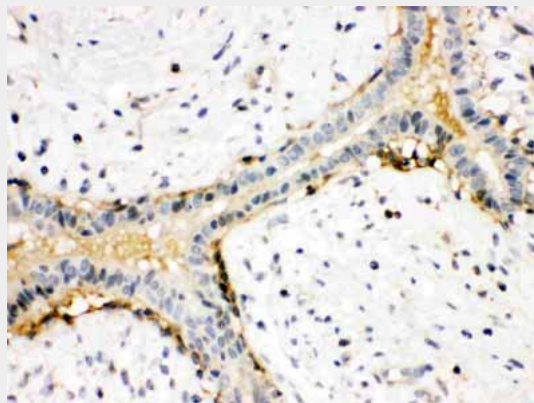
Anti- ACTIN antibody, ABO12749, Western blotting All lanes: Anti ACTIN (ABO12749) at 0.5ug/ml Lane 1: Rat Liver Tissue Lysate at 50ug Lane 2: Rat Kidney Tissue Lysate at 50ug Lane 3: Mouse Spleen Tissue Lysate at 50ug Lane 4: HELA Whole Cell Lysate at 40ug Lane 5: COLO320 Whole Cell Lysate at 40ug Lane 6: SMMC Whole Cell Lysate at 40ug Lane 7: A549 Whole Cell Lysate at 40ug Predicted bind size: 42KD Observed bind size: 42KD



Anti- ACTIN antibody, ABO12749, IHC(P) IHC(P): Mouse Intestine Tissue



Anti- ACTIN antibody, ABO12749, IHC(P) IHC(P): Rat Spleen Tissue



Anti- ACTIN antibody, ABO12749, IHC(P) IHC(P): Human Mammary Cancer Tissue

### **Anti-Actin Antibody - Background**

Actin, a highly conserved protein, is a major component of both the cytoskeletal and contractile structures in the cell types. It varies in amount, being related to the type of differentiation and to the functional state of cells and tissues. The actins exhibit over 90% sequence homology, but each isoform has a unique NH<sub>2</sub>-terminal sequence. The isoforms are comprised of three alpha-actin, one

beta-actin, two gamma-actin. Because the amino acid sequence of the C-terminal is the same for almost all actins, this antibody has been raised using a synthetic peptide corresponding to the C-terminal 11 residues.