

## Basic Information

<b>Product Name</b>	Anti-ACTIN Antibody (Clone#AC-40)		
<b>Gene Name</b>	ACTA1/ACTA2/ACTC1/ACTB/ACTG1/ACTG2		
<b>Source</b>	Mouse		
<b>Isotype</b>	IgG2a		
<b>Species Reactivity</b>	human, chicken, mouse, rat		
<b>Tested Application</b>	WB, IHC-F		
<b>Contents</b>	200ug/ml antibody with PBS , 0.02% NaN <sub>3</sub> , 1mg BSA and 50% glycerol.		
<b>Immunogen</b>	Synthetic actin C-terminal peptide Ser-Gly-Pro-Ser-Ile-Val-His-Arg-Lys-Cys-Phe, attached to a Multiple Antigen Peptide(MAP) backbone.		
<b>concentration</b>	200 ug/ml		
<b>Purification</b>	Ascites		
<b>Observed MW</b>	42KD		
<b>Dilution Ratios</b>	Western blot(WB): 1:500-2000 Immunohistochemistry in frozen section (IHC-F): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.		

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

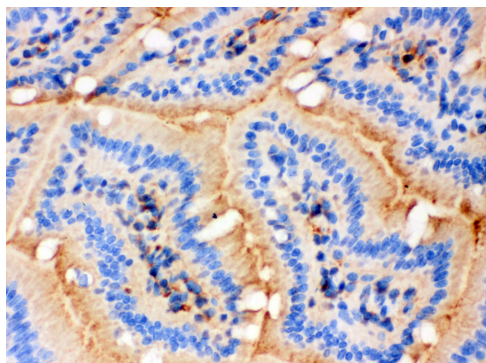
## Background Information

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.

## Reference

Anti-ACTIN Antibody (Clone#AC-40)被引用在22文献中。

## Selected Validation Data



IHC(F): Mouse Intestine Tissue

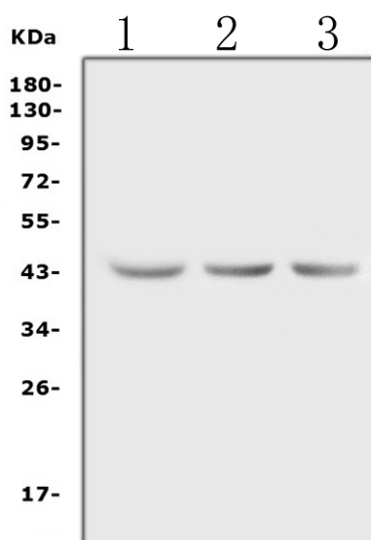


Figure 6. Western blot analysis of Actin using anti-Actin antibody (BM0005).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human HEK293 whole cell lysate,

Lane 2: rat PC-12 whole cell lysate,

Lane 3: mouse NIH3T3 cell lysate.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Actin antigen affinity purified monoclonal antibody (Catalog # BM0005) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Actin at approximately 42KD. The expected band size for Actin is at 42KD.