

Basic Information

Product Name	Anti-Actin Antibody (Clone#3H5)	
Gene Name	ACTA1	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG1	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Actin, identical to the related mouse and rat sequences.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	42 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section IHC 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.

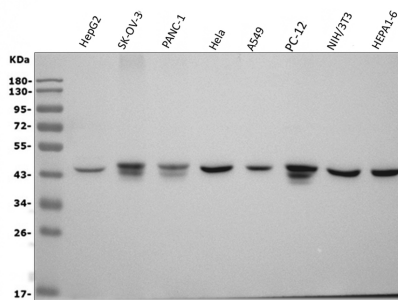
Background Information

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 NH₂-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#3H5)被引用在4文献中。

Selected Validation Data



Western blot analysis of Actin using anti-Actin antibody (M02014-5). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Human hepg2 whole cell lysates,

Lane 2: Human SKOV3 whole cell lysates,

Lane 3: Human PANC-1 whole cell lysates,

Lane 4: Human HELA whole cell lysates,

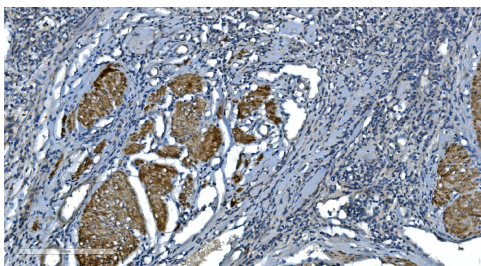
Lane 5: Human A549 whole cell lysates,

Lane 6: rat PC-12 whole cell lysates,

Lane 7: mouse NIH/3T3 whole cell lysates,

Lane 8: mouse HEPA1-6 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Actin antigen affinity purified monoclonal antibody (M02014-5) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Actin at approximately 42 kDa. The expected band size for Actin is at 42 kDa.



IHC analysis of Actin using anti-Actin antibody (M02014-5).

Actin was detected in a paraffin-embedded section of human bladder cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-Actin Antibody (M02014-5) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.