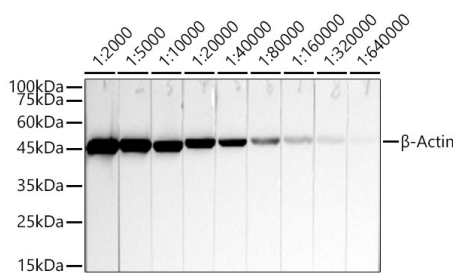


<b>Cat. No:</b>	MAB-24008
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100 ug
<b>Clone:</b>	AC-015
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1,Kappa
<b>Immunogen:</b>	Fusion protein of human $\beta$ -Actin
<b>Reactivity:</b>	Hu, Rt, Ms
<b>Applications:</b>	Western Blot: 1:2000 - 1:20000 Immunofluorescence: 1:50 - 1:200 Immunocytochemistry: 1:50 - 1:200
<b>Molecular Weight:</b>	42kDa
<b>Purification:</b>	Affinity purification
<b>Synonyms:</b>	BRWS1; PS1TP5BP1

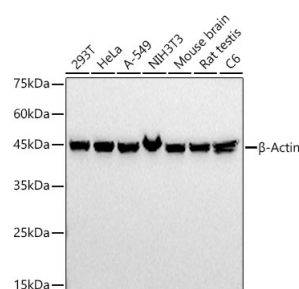
**Background:**

Beta Actin, also named as ACTB and F-Actin, belongs to the actin family. Actins are highly conserved globular proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. At least six isoforms of actins are known in mammals and other vertebrates: alpha ( ACTC1, cardiac muscle 1), alpha 1 ( ACTA1, skeletal muscle) and 2 ( ACTA2, aortic smooth muscle), beta ( ACTB), gamma 1 ( ACTG1) and 2 ( ACTG2, enteric smooth muscle). Beta and gamma 1 are two non-muscle actin proteins. Most actins consist of 376aa, while ACTG2 (rich in muscles) has 375aa and ACTG1(found in non-muscle cells) has only 374aa. Beta Actin has been widely used as the internal control in RT-PCR and Western Blotting as a 42-kDa protein. This antibody was generated by full length beta actin protein and can cross-react with other actins.

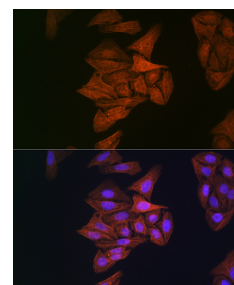
<b>Form:</b>	Liquid
<b>Buffer:</b>	PBS with 0.01% thimerosal,50% glycerol,pH7.3.
<b>Storage:</b>	Store at -20°C. Avoid freeze / thaw cycles



Western blot analysis of extracts of HeLa cells, using  $\beta$ -Actin Mouse mAb at 1:2000- 1:640000 dilution.  
Secondary antibody: HRP Goat Anti-Mouse IgG (H+L) at 1:10000 dilution.



Western blot analysis of extracts of various lysates, using  $\beta$ -Actin Mouse mAb at 1:20000 dilution.  
Secondary antibody: HRP Goat Anti-Mouse IgG (H+L) at 1:10000 dilution.



Immunofluorescence analysis of U2OS cells using  $\beta$ -Actin Mouse mAb at dilution of 1:100 (40x lens).  
Blue: DAPI for nuclear staining.

Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in  
TBST.  
Detection: ECL West Pico Plus.  
Exposure time: 10s.

Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in  
TBST.  
Detection: ECL West Pico Plus.  
Exposure time: 1s.

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