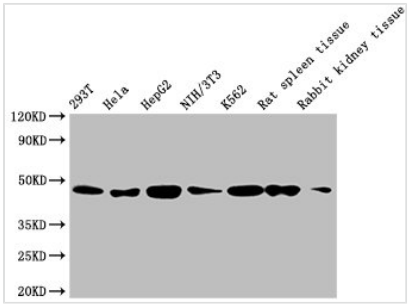
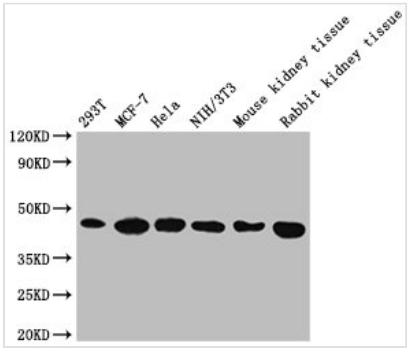
ACTB Monoclonal Antibody

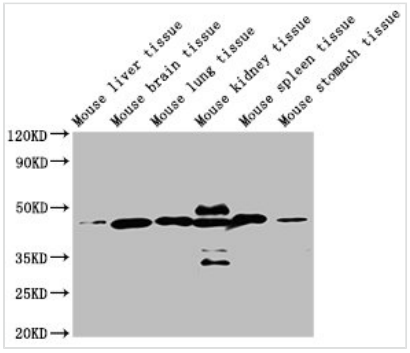
Product Code	CSB-MA000091M1m
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P60709
Immunogen	A synthesized peptide derived from human Beta-Actin (1-50AA)
Raised In	Mouse
Species Reactivity	Human, Mouse, Rat, Rabbit
Tested Applications	ELISA, WB, IHC, IF, FC; Recommended dilution: WB: 1:5000-1:80000, IHC: 1:500-1:1000, IF: 1:50-1:200, FC: 1:100-1:300
Relevance	Beta Actin, also named as ACTB and F-Actin, belongs to the actin family. Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. Beta Actin has been widely used as the internal control in bioscience. At least six isoforms are known in mammals. ALPHA-actin was predominant in single cells and BETA-actin was major in the cultured cells. Nonmuscle BETA- and GAMMA-actin, also known as cytoplasmic actin, are predominantly expressed in nonmuscle cells. ALPHA-cardiac and α-skeletal actin are expressed in striated cardiac and skeletal muscles, respectively; two smooth muscle actins, ALPHA- and GAMMA-actin, are found primarily in vascular smooth muscle and enteric smooth muscle, respectively. Most actins consist of 376aa, while ACTG2 (rich in muscles) has 375aa and ACTG1(found in non-muscle cells) has only 374aa. This antibody can detect endogenous level of β-Actin and may cross-react with other isoforms of actin family.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	>95%, Protein A purified
Isotype	IgG2b
Clonality	Monoclonal
Product Type	Monoclonal Antibody
Immunogen Species	Homo sapiens (Human)
Target Names	ACTB
Clone No.	1D12E12B5
Image	



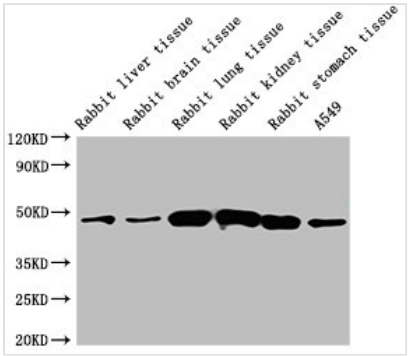
Western Blot
Positive WB detected in: 293T whole cell lysate, Hela whole cell lysate, HepG2 whole cell lysate, NIH/3T3 whole cell lysate, K562 whole cell lysate, Rat spleen tissue, Rabbit kidney tissue
All lanes: ACTB antibody at 1:5000
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 42 KDa
Observed band size: 42 KDa
Exposure time?5min



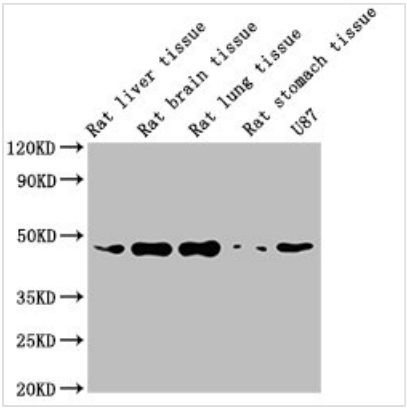
Western Blot
Positive WB detected in: 293T whole cell lysate, MCF-7 whole cell lysate, Hela whole cell lysate, NIH/3T3 whole cell lysate, Mouse kidney tissue, Rabbit kidney tissue
All lanes: ACTB antibody at 1:5000
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 42 KDa
Observed band size: 42 KDa
Exposure time?5min



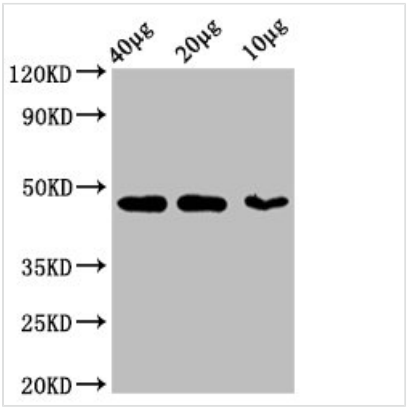
Western Blot
Positive WB detected in: Mouse liver tissue, Mouse brain tissue, Mouse lung tissue, Mouse kidney tissue, Mouse spleen tissue, Mouse stomach tissue
All lanes: ACTB antibody at 1:5000
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 42 KDa
Observed band size: 42 KDa
Exposure time?5min



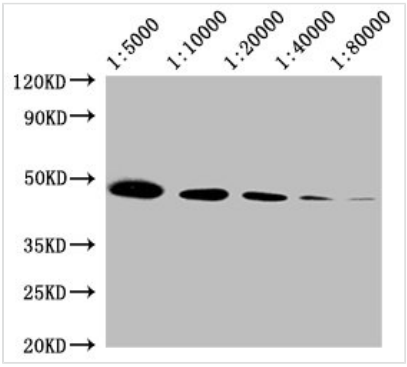
Western Blot
Positive WB detected in: Rabbit liver tissue, Rabbit brain tissue, Rabbit lung tissue, Rabbit kidney tissue, Rabbit stomach tissue, A549 whole cell lysate
All lanes: ACTB antibody at 1:5000
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 42 KDa
Observed band size: 42 KDa
Exposure time?5min



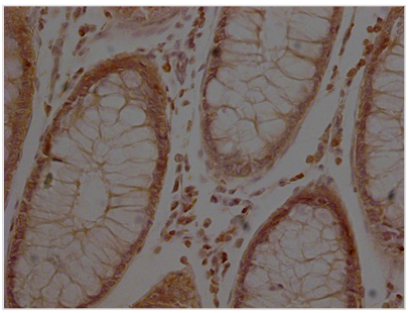
Western Blot
Positive WB detected in: Rat liver tissue, Rat brain tissue, Rat lung tissue, Rat stomach tissue, U87 whole cell lysate
All lanes: ACTB antibody at 1:5000
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 42 KDa
Observed band size: 42 KDa
Exposure time?5min



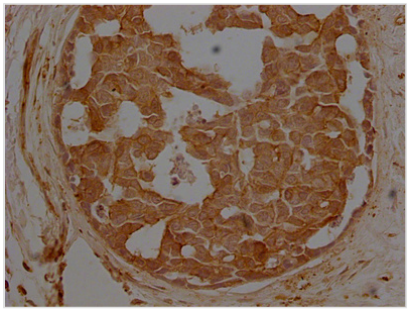
Western Blot
Positive WB detected in: 293T whole cell lysate at 40μg, 20μg, 10μg
All lanes:ACTB antibody at 1:5000
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 42 KDa
Observed band size: 42 KDa
Exposure time?5min



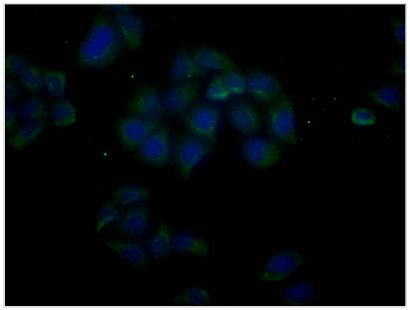
Western Blot
Positive WB detected in: 20μg 293T whole cell lysate
ACTB antibody at 1:5000, 1:10000, 1:20000, 1:40000, 1:80000
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 42 KDa
Observed band size: 42 KDa
Exposure time?5min



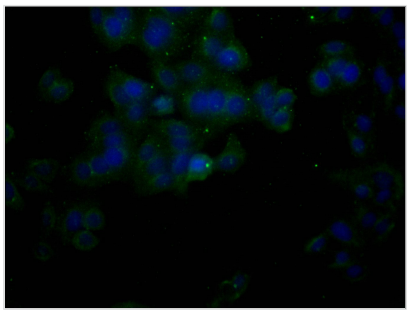
IHC image of CSB-MA000091M1m diluted at 1:500 and staining in paraffin-embedded colon cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at 37? Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-Mouse IgG labeled by HRP and visualized using 0.05% DAB.



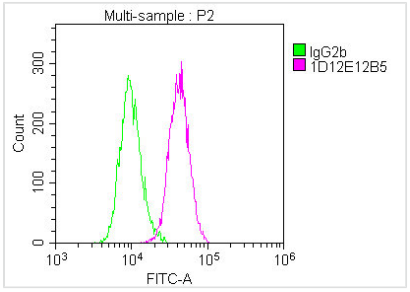
IHC image of CSB-MA000091M1m diluted at 1:500 and staining in paraffin-embedded breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at 37? Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-Mouse IgG labeled by HRP and visualized using 0.05% DAB.



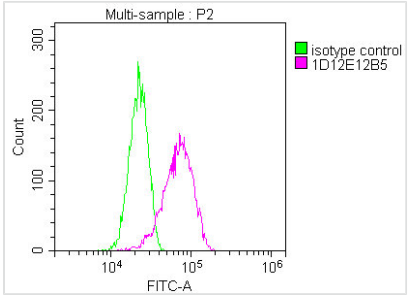
Immunofluorescence staining of Hela cells with CSB-MA000091M1m at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG ?H+L?.



Immunofluorescence staining of HepG2 cells with CSB-MA000091M1m at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG ?H+L?.



Overlay Peak curve showing Hela cells stained with CSB-MA000091M1m (red line) at 1:200. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg/1*106cells) for 1 h at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/100 dilution for 30min at 4°C. Isotype control antibody (green line) was mouse IgG2b (1µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.



Overlay Peak curve showing HepG2 cells stained with CSB-MA000091M1m (red line) at 1:200. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg/1*106cells) for 1 h at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/100 dilution for

30min at 4°C. Isotype control antibody (green line) was mouse IgG2b (1μg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.