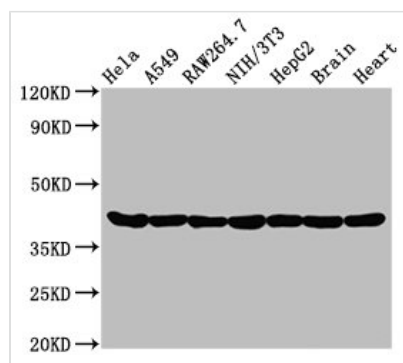




ACTA1 Recombinant Monoclonal Antibody

Product Code	CSB-RA001205A0HU
Abbreviation	Actin, alpha skeletal muscle
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P68133
Immunogen	A synthesized peptide
Species Reactivity	Human, Mouse, Rat
Tested Applications	ELISA, WB, IHC, IF, FC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:500, IF:1:30-1:200
Relevance	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Tags & Cell Markers
Gene Names	ACTA1
Clone No.	25E3

Image

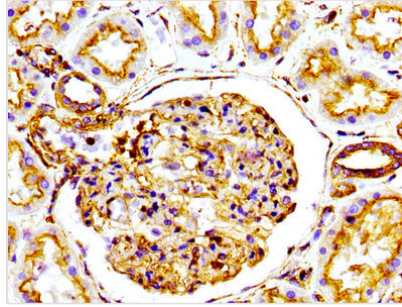


Western Blot

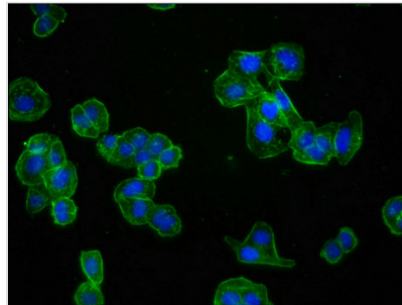
Positive WB detected in: HeLa whole cell lysate, A549 whole cell lysate, Raw264.7 whole cell lysate, NIH/3T3 whole cell lysate, HepG2 whole cell lysate, Rat brain tissue, Rat heart tissue
All lanes: Actin antibody at 0.95μg/ml

Secondary

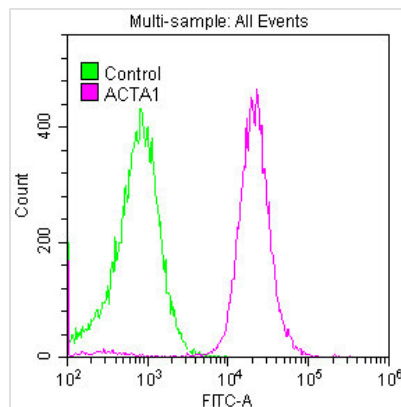
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 42 KDa
Observed band size: 42 KDa



IHC image of CSB-RA001205A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica Bond™ 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 RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of HepG2 cells with CSB-RA001205A0HU at 1:60, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Overlay histogram showing HeLa cells stained with CSB-RA001205A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4°C. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

Description

CUSABIO generated the ACTA1 antibody through a multi-step process. Initially, an animal is immunized with a synthesized peptide derived from human ACTA1. B cells are isolated from the immunized animal. Selecting the ACTA1 antibody-producing B cells and identifying the single clones. The resulting ACTA1 antibody is then sequenced, and its corresponding antibody gene is synthesized. CUSABIO subsequently clones the ACTA1 antibody gene into plasma vectors, which are subsequently introduced into mammalian cells using a lipid-based transfection reagent. Following transient expression, the antibodies against ACTA1 are harvested and thoroughly characterized. The ACTA1 recombinant monoclonal antibody is purified using affinity chromatography from the culture medium. This highly purified antibody is specifically designed for the detection of human, mouse, and rat ACTA1 protein in ELISA, WB, IHC, IF, and FC applications.