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PRODUCT DATASHEET

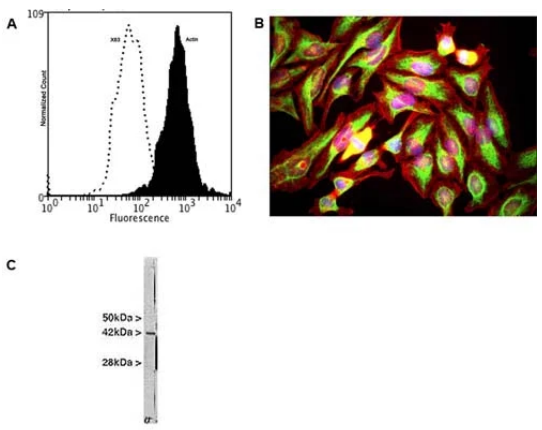
Anti-Actin Antibody

Product Details

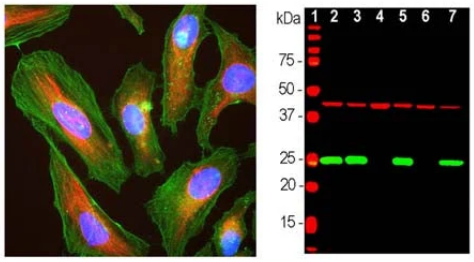
Available Variants	100 µg (SKU:M-1646-100)
Conjugate	Unconjugated
Isotype	IgG1
Clone	5J11
Host Species	Mouse
Format	IgG
Physical State	Lyophilized
Buffer	Lyophilized from PBS buffer pH 7.2-7.6 with 0.1% trehalose, and sodium azide
Production Notes	Protein G purified
Applications	Flow, ICC, WB
Dilution Ranges	WB: 1:5000-1:10000 ICC: 1:500-1:1000
Species Reactivity	Bovine, Horse, Human, Pig, Rat
Immunogen	Actin prepared from bovine brain.
Specificity	The antibody reacts with a 42 kDa band by Western blot on a crude extract from HeLa cells. It has also been used successfully for immunocytochemistry. It reacts across a broad range of mammalian species.
Molecular Weight	42 kDa
Storage	Spin vial briefly before opening. Reconstitute with 100 µL sterile-filtered, ultrapure water to achieve a 1 mg/mL concentration. Centrifuge to remove any insoluble material. After reconstitution of lyophilized antibody, aliquot and store at -20°C for a higher stability. Avoid freeze-thaw cycles.
UniProt ID	P68138 UniProt Summary: Actins are highly conserved proteins that are involved in

	various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.
NCBI Gene ID	281592

Product Images



A: Specific staining of Actin expressed in human neuroblastoma SH-SY5Y cell line by Flow Cytometry using cat # M-1646-100. Fixing and Permeabilization of cells: Absolute methanol (10 minutes in ice) and 0.1% Tween-20 in PBS, Blocking: 1% BSA, Primary antibody: M-1646-100, 2 µg per ~10^6 cells, 30 minutes at room temperature, Secondary antibody: Goat anti-mouse PE (1:100), 20 minutes in dark at room temperature. Negative control: Non-specific Control IgG, clone X63 (cat # M-1249-200, black dashed). Data and results were generated using Orflo Moxiflow^{TM} instrument and protocols. **B:** HeLa cells stained with M-1646-100 (red) and also with our chicken polyclonal antibody to Vimentin (C-1409-50). The actin antibody stains the submembranous actin rich cytoskeleton and also stress fibers, bundles of actin associated with adhesion sites. The vimentin antibody stains a quite different cytoskeletal network, the intermediate filaments. The blue stain reveals DNA in the nuclei of these cells. **C:** Crude extract of HeLa cells. The antibody recognizes the ~42 kDa protein.



Left: Actin expression in HeLa cells visualized with mouse antibody to actin (green) by **Immunocytochemistry**. Vimentin was co-stained with chicken antibody to vimentin (C-1409-50, red). Blue: DAPI nuclear stain.The actin antibody labels the submembranous actin-rich cytoskeleton, stress fibers and bundles of actin associated with cell adhesion sites. The vimentin antibody stains a different cytoskeletal network, the intermediate or 10 nm filaments. **Right: Western blot** analysis of tissue and cell lysates probed with mouse anti-actin antibody (red, lanes 2-7). [1] protein standard, [2] rat brain, [3] mouse brain, [4] NIH-3T3, [5] HEK293, [6] HeLa, [7] SH-SY5Y cells. The same blot was simultaneously probed chicken antibody against UCHL1 (C-1406-50, green), a marker of neuronal lineage cells.