



**PhosphoSolutions®**  
Antibodies that work™

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## Anti-Actin

**Catalog Number:** 125-ACT      **Size:** 100 µl      **Isotype:** IgG<sub>1</sub>      **Clone:** C4

**Product Description:** Mouse monoclonal antibody

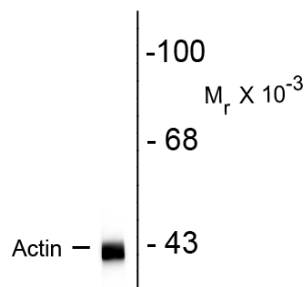
**Applications:**      **WB:**1:5,000      **IF:** 1:500      **IHC:** 1:500

**Antigen:** Chicken gizzard actin.

**Species reactivity:** The antibody reacts with all known actins from yeast to man.

**Biological Significance:** Actin is the most abundant protein found in virtually all eukaryotic cells. It is also one of the most highly-conserved proteins, differing by no more than 20% in species as diverse as algae and humans, making it an excellent choice for use as a loading control. It is the monomeric subunit of microfilaments, one of the three major components of the cytoskeleton, and of thin filaments, which are part of the contractile apparatus in muscle cells. Thus, actin participates in many important cellular functions, including muscle contraction, cell motility, cell division and cytokinesis, vesicle and organelle movement, cell signaling, and the establishment and maintenance of cell junctions and cell shape.

### Anti-Actin



**Western blot** of rat hippocampal homogenate showing specific immunolabeling of the ~ 42k actin protein.

**Purification Method:** Unpurified ascites fluid.

**Antibody Specificity:** Specific for the ~42 kDa actin protein in lysates from skeletal, cardiac, gizzard and aorta tissues. Reacts with all actin isoforms.

**Quality Control Tests:** Western blots performed on each lot.

**WB** = Western Blot    **IF** = Immunofluorescence    **IHC** = Immunohistochemistry    **IF** = Immunocytochemistry

**Packaging:** Liquid containing 0.01% sodium azide.

**Storage and Stability:** Store at -20°C in undiluted aliquots; stable for at least one year. Avoid freeze/thaw cycles.

**Shipment:** Domestic - Blue Ice; International - Blue Ice or Dry Ice.

**For research use only; and not for diagnostic or therapeutic use or for use in humans.**

**References:**

Lessard, JL. Two monoclonal antibodies to actin: one muscle selective and one generally reactive. *Cell Motility and Cytoskeleton* (1998) 10:349-362.

**WB** = Western Blot   **IF** = Immunofluorescence   **IHC** = Immunohistochemistry   **IP** = Immunoprecipitation

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