

**Anti-Actin (C-terminal region) Antibody**  
**Catalog # AN1617****Specification****Anti-Actin (C-terminal region) Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P60709</a>
Reactivity	Bovine, Chicken
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG2a
Calculated MW	41737

**Anti-Actin (C-terminal region) Antibody - Additional Information****Gene ID** 60**Target/Specificity**

Actin is a major cytoskeletal protein involved in diverse cellular functions including cell motility, adhesion, and morphology. Six different actin isoforms have been identified in vertebrates. There are four  $\alpha$  isoforms: skeletal, cardiac, and two smooth muscle (enteric and aortic) actins, along with two cytoplasmic actins ( $\beta$  and  $\gamma$ ). Actin exists in two principal forms, globular, monomeric (G) actin, and filamentous polymeric (F) actin. The assembly and disassembly of actin filaments, and also their organization into functional networks, is regulated by a variety of actin-binding proteins (ABPs). Phosphorylation may also be important for regulating actin assembly and interaction with ABPs. In Dictyostelium, phosphorylation of Tyr-53 occurs in response to cell stress and this phosphorylation may alter actin polymerization. In B cells, SHP-1 tyrosine dephosphorylation of actin leads to actin filament depolymerization following BCR stimulation

**Dilution**WB~~1:1000  
IHC~~1:100~500**Format**

Protein G Purified

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Anti-Actin (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

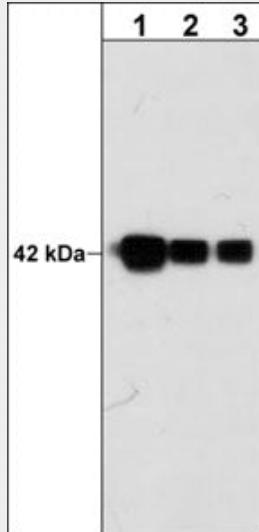
Blue Ice

**Anti-Actin (C-terminal region) Antibody - Protocols**

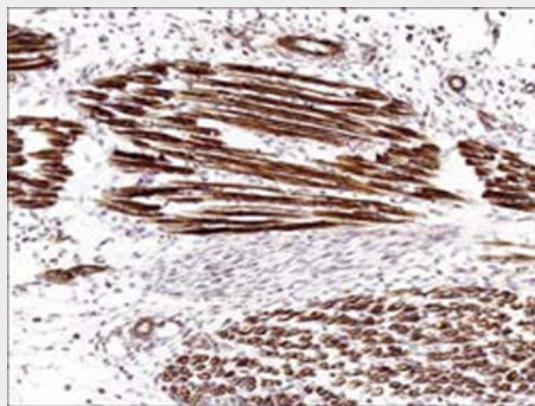
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-Actin (C-terminal region) Antibody - Images



Western blot analysis of mouse C2C12 cells probed with mouse monoclonal anti-Actin (C-terminal region) antibody at 1:1000 (lane 1), 1:2000 (lane 2), or 1:4000 (lane 3).



Formalin fixed, citric acid treated paraffin sections of E18 mouse skeletal muscle. Sections were probed with anti-Actin (AM2021) then anti-Mouse:HRP before detection using DAB. (Images provided by Carl Hobbs and Dr. Pat Doherty at Wolfson Centre for Age-Related Diseases, King's College London).

#### Anti-Actin (C-terminal region) Antibody - Background

Actin is a major cytoskeletal protein involved in diverse cellular functions including cell motility, adhesion, and morphology. Six different actin isoforms have been identified in vertebrates. There are four  $\alpha$  isoforms: skeletal, cardiac, and two smooth muscle (enteric and aortic) actins, along with

two cytoplasmic actins ( $\beta$  and  $\gamma$ ). Actin exists in two principal forms, globular, monomeric (G) actin, and filamentous polymeric (F) actin. The assembly and disassembly of actin filaments, and also their organization into functional networks, is regulated by a variety of actin-binding proteins (ABPs). Phosphorylation may also be important for regulating actin assembly and interaction with ABPs. In Dictyostelium, phosphorylation of Tyr-53 occurs in response to cell stress and this phosphorylation may alter actin polymerization. In B cells, SHP-1 tyrosine dephosphorylation of actin leads to actin filament depolymerization following BCR stimulation