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Anti-Actin (Tyr-53), Phosphospecific Antibody
Catalog # AN1615

Specification

Anti-Actin (Tyr-53), Phosphospecific Antibody - Product Information

Application	**WB**
Primary Accession	P60709
Reactivity	**Bovine, Chicken**
Host	**Rabbit**
Clonality	**Rabbit Polyclonal**
Isotype	**IgG**
Calculated MW	**41737**

Anti-Actin (Tyr-53), Phosphospecific 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 α isoforms: skeletal, cardiac, and two smooth muscle (enteric and aortic) actins, along with two cytoplasmic actins (β and γ). 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.

Format
Antigen Affinity 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 (Tyr-53), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-Actin (Tyr-53), Phosphospecific Antibody - Protocols

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

- Western Blot
- Blocking Peptides

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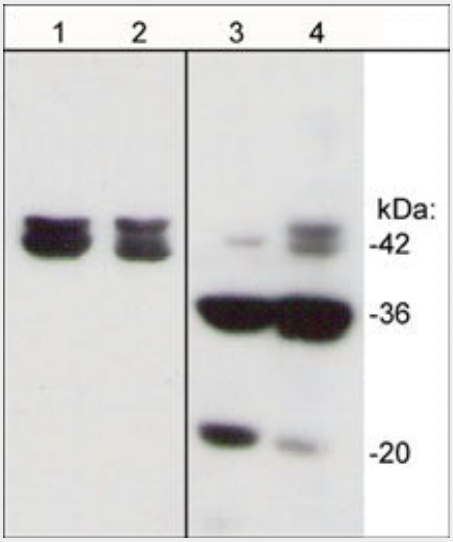
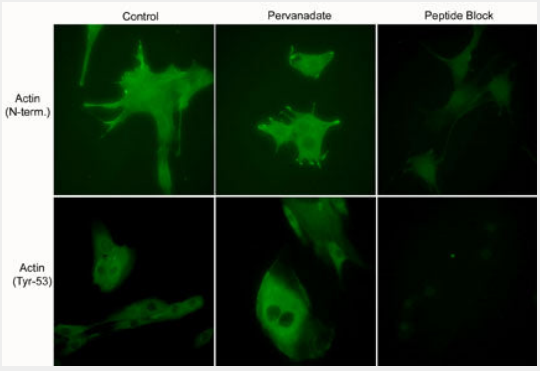
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Actin (Tyr-53), Phosphospecific Antibody - Images



Western blot analysis of mouse C2C12 cells untreated (lanes 1 & 3), or treated with pervanadate (1 mM) for 30 min (lanes 2 & 4). The blot was probed with anti-Actin (N-terminal) antibody (lanes 1 & 2) or anti-Actin (Tyr-53) antibody (lanes 3 & 4).



Immunocytochemical labeling using anti-Actin (N-terminal) and anti-Actin (Tyr-53) polyclonal antibodies in C2C12 cells control (left) or treated with pervanadate (1 mM) for 30 min (middle). The cells were fixed in paraformaldehyde and permeabilized in acetone. Both antibodies were used in the presence of blocking peptide: Actin (N-terminal) peptide (AX1655) or phospho-Actin (Tyr-53) peptide (AX1675), respectively (right).

Anti-Actin (Tyr-53), Phosphospecific 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 α isoforms: skeletal, cardiac, and two smooth muscle (enteric and aortic) actins, along with two cytoplasmic actins (β and γ). 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

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