

Anti-Actin (Tyr-53), Phosphospecific Antibody

Catalog # AN1615

Product Information

ApplicationWB, ICCPrimary AccessionP60709HostRabbit

Clonality Rabbit Polyclonal

Isotype IgG **Calculated MW** 41737

Additional Information

Gene ID 60

Other Names Actin, cytoplasmic 1, 3.6.4.-, Beta-actin, Actin, cytoplasmic 1, N-terminally

processed, ACTB

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.

Dilution WB~~1:1000 ICC~~N/A

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

Background

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y). 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.