

Product datasheet for **TA389040**

ACTB Mouse Antibody [Clone ID: M008]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M008
Applications:	ICC, IP, WB
Recommended Dilution:	WB: 1:1000 ICC: 1:50
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Immunogen:	Clone M008 was generated from a proprietary antigen related to human β -actin in MDA-MB-231 breast cancer cell line.
Specificity:	Clone M008 detects a 42 kDa* protein corresponding to the molecular mass of β -actin on SDS-PAGE immunoblots of human cancer cell lines, as well as human recombinant β -actin. This actin antibody preferentially detects human β -actin with only weak reactivity toward actins in rat, mouse, or rabbit. The antibody works in multiple applications including western blot, immunocytochemical labeling, ELISA, and immunoprecipitation. In addition, mass spectrometry analysis of immunoprecipitates using AM0081 in human A431 cell lysate confirmed that this antibody detects β -actin.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Protein G Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	42
Database Link:	P60709



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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 (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

Note:

Protein G purified tissue culture supernatant.