

Anti-beta Actin Mouse Monoclonal Antibody

Catalog # ABO15135

Product Information

Application	WB, IHC, IF, ICC
Primary Accession	P60709
Host	Mouse
Isotype	IgG1
Reactivity	Rat, Human, Mouse, Rabbit, Chicken
Clonality	Monoclonal
Format	Liquid
Description	Anti-beta Actin Mouse Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat, Chicken, Rabbit.

Additional Information

Gene ID	60
Other Names	Actin, cytoplasmic 1, 3.6.4.-, Beta-actin, Actin, cytoplasmic 1, N-terminally processed, ACTB
Calculated MW	41737
Application Details	WB 1:3000-1:10000 IHC 1:100-1:200 ICC/IF 1:100-1:200
Source	Eukaryota
Contents	Mouse IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names Immunogen	Clone: 17A10 A synthesized peptide derived from human beta Actin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

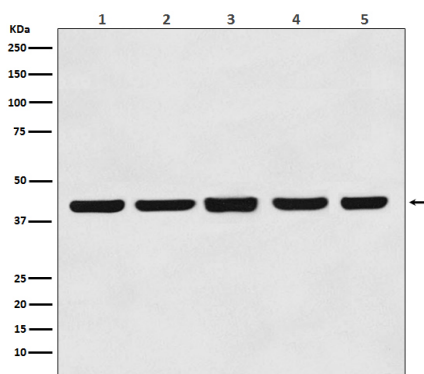
Name	ACTB
Function	Actin is a highly conserved protein that polymerizes to produce filaments that form cross-linked networks in the cytoplasm of cells (PubMed: 25255767 , PubMed: 29581253). Actin exists in both monomeric (G-actin) and polymeric

(F-actin) forms, both forms playing key functions, such as cell motility and contraction (PubMed:[29581253](#)). In addition to their role in the cytoplasmic cytoskeleton, G- and F- actin also localize in the nucleus, and regulate gene transcription and motility and repair of damaged DNA (PubMed:[29925947](#)). Plays a role in the assembly of the gamma-tubulin ring complex (gTuRC), which regulates the minus-end nucleation of alpha-beta tubulin heterodimers that grow into microtubule protofilaments (PubMed:[39321809](#), PubMed:[38609661](#)). Part of the ACTR1A/ACTB filament around which the dynactin complex is built (By similarity). The dynactin multiprotein complex activates the molecular motor dynein for ultra-processive transport along microtubules (By similarity).

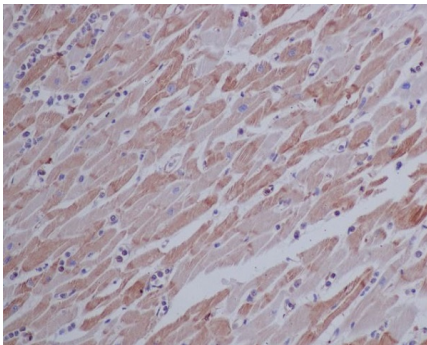
Cellular Location

Cytoplasm, cytoskeleton. Nucleus Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

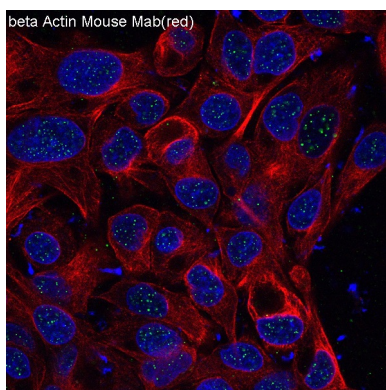
Images



Western blot analysis of beta Actin expression in (1) HeLa cell lysate; (2) Rat brain lysate; (3) Mouse brain lysate; (4) Chicken lung lysate; (5) Rabbit testis lysate with beta Actin mouse mAb



Immunohistochemical analysis of paraffin-embedded human heart, using beta Actin Mouse Monoclonal Antibody.



Immunofluorescent analysis of HepG2 cells, using beta Actin mAb.

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