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Product datasheet for AM33002PU-N

beta Actin (ACTB) Mouse Monoclonal Antibody [Clone ID: 4C2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	4C2
Applications:	ELISA, FC, IF, IHC, WB
Recommended Dilution:	**ELISA.** **Flow cytometry.** **Western blot.** **Immunocytochemistry.** **Immunohistochemistry on Frozen sections.** **Immunohistochemistry on Paraffin-embedded sections.** *Recommended Dilutions*: 1/50-1/100 for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent and 1/100-1/500 for immunoblotting applications.
Reactivity:	Chicken, Human, Mouse, Porcine, Rabbit, Rat, Zebrafish
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Peptide comprising the N-terminal nonapeptide of β-Cytoplasmic Actin with an acetylated N-terminus coupled to KLH through the cysteine residue
Specificity:	This 4C2 Monoclonal antibody is highly specific for β-Cytoplasmic Actin. The antibody **does not** cross react with other Actin isoforms.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles.
Stability:	Shelf life: One year from despatch.

View online »

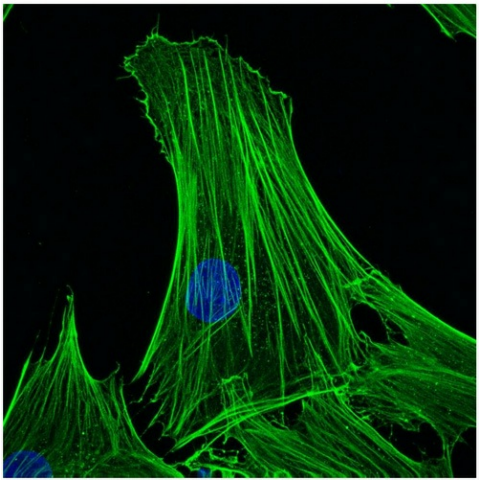
Gene Name: actin, beta

Database Link: Entrez Gene 60 Human
P60709

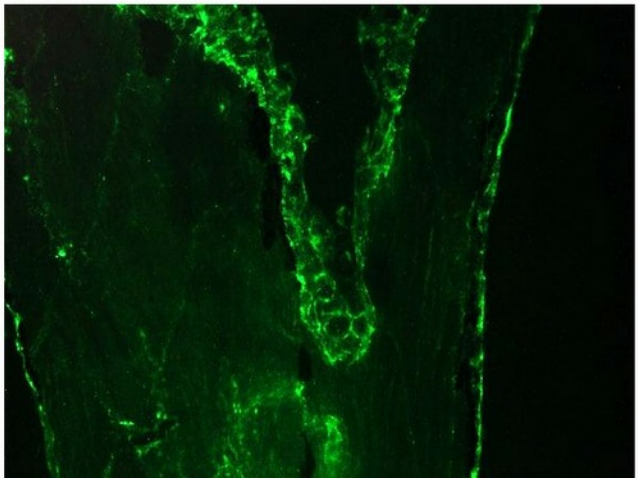
Background: Among the six actin isoforms described in mammals, two are found in virtually all cells (β- and γ-cytoplasmic), two are detected in smooth muscle cells (α- and γ-smooth muscle) and two are present in striated muscles, one predominantly in skeletal (α-skeletal) and one in cardiac (α-cardiac) muscle cells. These actin isoforms differ slightly in their N-terminus, but the sequence of each of these actins is highly conserved in higher vertebrates.
β- and γ-cytoplasmic actin play crucial roles during various key cellular processes. Whereas β-actin is preferentially localized in stress fibers, circular bundles and at cell-cell contacts, suggesting a role in cell attachment and contraction, γ-actin displays a more versatile organization, according to cell activities. In moving cells, γ-actin is mainly organized as a meshwork in cortical and lamellipodial structures, suggesting a role in cell motility. β- and γ-actin depleted fibroblasts exhibit distinct changes in motility compared with their controls, suggesting a specific role for each isoform in cell locomotion.

Synonyms: Actin cytoplasmic 1, Beta-Actin

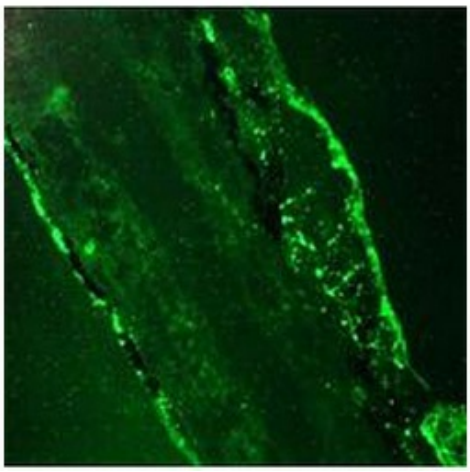
Product images:



Methanol fixed human dermal fibroblast immunostained with 4C2 (1/500)



Immunofluorescence staining of 1 month old zebrafish embryo.



Immunofluorescence staining of 3 days old zebrafish embryo