

Product datasheet for **AM33003PU-N**

gamma Actin (ACTG1) (Cytopl.) Mouse Monoclonal Antibody [Clone ID: 2A3]

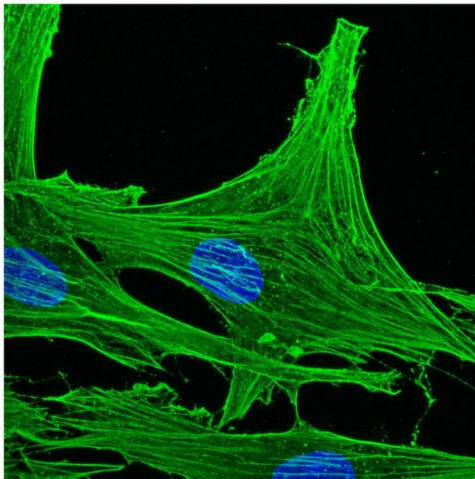
Product data:

Product Type:	Primary Antibodies
Clone Name:	2A3
Applications:	ELISA, FC, IF, IHC, WB
Recommended Dilution:	ELISA. Flow Cytometry. Immunoblotting Immunocytochemistry on fixed cells. Immunohistochemistry on Frozen Sections. Immunohistochemistry on Paraffin-Embedded Sections. <i>Recommended Dilutions:</i> 1/100-1/500 for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent and 1/1000-1/5000 for immunoblotting applications.
Reactivity:	Chicken, Human, Mouse, Porcine, Rabbit, Rat, Zebrafish
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Peptide comprising the N-terminal nonapeptide of γ -cytoplasmic Actin with an acetylated N-terminus coupled to KLH through the cysteine residue.
Specificity:	This 2A3 Monoclonal antibody is highly specific for γ -cytoplasmic Actin (γ -actin 1; encoded by ACTG1). It does not cross-react with the γ -actin isoform expressed in the enteric smooth muscle tissues (γ -actin 2; encoded by ACTG2).
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated



[View online »](#)

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.
Gene Name:	actin gamma 1
Database Link:	Entrez Gene 71 Human P63261
Background:	<p>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.</p> <p>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.</p>
Synonyms:	ACT; ACTB; ACTG; DFNA20; DFNA26; Gamma-actin

Product images:

Methanol fixed human dermal fibroblasts immunostained with 2A3 (1/500)