

Rabbit Actin gamma2 Polyclonal Antibody | anti-ACTG2 antibody

Actin gamma2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322002	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Actin gamma2; Polyclonal Antibody; Actin gamma2 Antibody; ACT; ACTA3; ACTE; ACTG2; ACTH_HUMAN; Actin; Actin gamma 2 smooth muscle enteric; Actin gamma enteric smooth muscle; Actin like protein; ACTL3; ACTSG; Alpha actin 3; Alpha-actin-3; Gamma 2 actin; Gamma-2-actin; gamma-enteric smooth muscle; Smooth muscle gamma actin; Smooth muscle gamma-actin; anti-ACTG2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Actin gamma2 antibody detects endogenous levels of total Actin gamma2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	333
Applicable Applications for anti-ACTG2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Actin gamma2
Subcellular Location	Cytoplasm > Cytoskeleton.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA322002 at 1/200 staining human Skeletal muscle tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of Actin gamma2 expression in COLO205 cells



IF (Immunofluorescence)

AAA322002 staining COLO205 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-ACTG2 antibody	Description: In vertebrates 3 main groups of actin isoforms, alpha, beta and gamma have been identified. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins coexist in most cell types as components of the cytoskeleton and as mediators of internal cell motility. Function: Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. Subunit Structure: Polymerization of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded helix. Each actin can bind to 4 others. Post-translational Modifications: Oxidation of Met-45 and Met-48 by MICALs (MICAL1, MICAL2 or MICAL3) to form methionine sulfoxide promotes actin filament depolymerization. MICAL1 and MICAL2 produce the (R)-S-oxide form. The (R)-S-oxide form is reverted by MSRB1 and MSRB2, which promotes actin repolymerization. Monomethylation at Lys-85 (K84me1) regulates actin-myosin interaction and actomyosin-dependent processes. Demethylation by ALKBH4 is required for maintaining actomyosin dynamics supporting normal cleavage furrow ingression during cytokinesis and cell migration. (Microbial infection) Monomeric actin is cross-linked by V.cholerae toxins RtxA and VgrG1 in case of infection: bacterial toxins mediate the cross-link between Lys-51 of one monomer and Glu-271 of another actin monomer, resulting in formation of highly toxic actin oligomers that cause cell rounding (PubMed:19015515). The toxin can be highly efficient at very low concentrations by acting on formin homology family proteins: toxic actin oligomers bind with high affinity to formins and adversely affect both nucleation and elongation abilities of formins, causing their potent inhibition in both profilin-dependent and independent manners (PubMed:26228148). Similarity: Belongs to the actin family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	315570273
NCBI GeneID	72
NCBI Accession #	NP_001186822.1
NCBI GenBank Nucleotide #	NM_001199893.1
UniProt Accession #	P63267; P12718; Q504R1; Q6FI22; B2R7E7; B4E315; D6W5H8; E9PG30
Molecular Weight	Observed: 42 kDa Predicted: 42 kDa
NCBI Official Full Name	actin, gamma-enteric smooth muscle isoform 2
NCBI Official Synonym Full Names	actin, gamma 2, smooth muscle, enteric
NCBI Official Symbol	ACTG2
NCBI Official Synonym Symbols	ACT; ACTE; VSCM; ACTA3; ACTL3; ACTSG
NCBI Protein Information	actin, gamma-enteric smooth muscle
UniProt Protein Name	Actin, gamma-enteric smooth muscle
UniProt Gene Name	ACTG2
UniProt Synonym Gene Names	ACTA3; ACTL3; ACTSG

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/actin-gamma2-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/322002>