



Rabbit Anti-ACTG2 antibody

SL10967R

Product Name:	ACTG2
Chinese Name:	肌动蛋白 α 3抗体
Alias:	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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Dog,Cow,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	42kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ACTG2:301-376/376
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Actins are highly conserved proteins that are involved in various types of cell motility and in the maintenance of the cytoskeleton. Three types of actins, alpha, beta and gamma, have been identified in vertebrates. Alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins co-

exist in most cell types as components of the cytoskeleton and as mediators of internal cell motility. This gene encodes actin gamma 2; a smooth muscle actin found in enteric tissues. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Based on similarity to peptide cleavage of related actins, the mature protein of this gene is formed by removal of two N-terminal peptides.[provided by RefSeq, Dec 2010]

Function:

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

Subunit:

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.

Subcellular Location:

Cytoplasm, cytoskeleton.

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 promote 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.

Similarity:

Belongs to the actin family.

SWISS:

P63267

Gene ID:

72

Database links:

[Entrez Gene: 396084](#)Chicken

[Entrez Gene: 281595](#)Cow

[Entrez Gene: 72](#)Human

[Entrez Gene: 11468](#)Mouse

[Entrez Gene: 25365](#)Rat

[Oimim: 102545](#)Human

[SwissProt: P63270](#)Chicken

[SwissProt: Q5E9B5](#)Cow

[SwissProt: P63267](#)Human

[SwissProt: P63268](#)Mouse

[SwissProt: P63269](#)Rat

[Unigene: 516105](#)Human

[Unigene: 292865](#)Mouse

[Unigene: 958](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

www.sunlongbiotech.com