SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-ACTG1 antibody

SL10968R

Product Name:	ACTG1
Chinese Name:	肌动蛋白γ1抗体
Alias:	ACT; ACTB; ACTG; ACTG_HUMAN; actg1; Actin, cytoplasmic 2; Actin, gamma 1; Actin, gamma 1 propeptide; cytoplasmic 2; Cytoskeletal gamma actin; Deafness, autosomal dominant 20; Deafness, autosomal dominant 26; DFNA20; DFNA26; N-terminally processed.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,
Applications:	ELISA=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 ACTG1:3-100/377
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 maintenance of the cytoskeleton. In vertebrates, three 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 co-exist in most cell types as components of the cytoskeleton, and as mediators of internal cell motility. Actin, gamma 1, encoded by this gene, is a cytoplasmic actin found in non-muscle cells. Mutations in this gene are associated with DFNA20/26, a subtype of autosomal dominant non-syndromic sensorineural progressive hearing loss. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Jan 2011] **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:** The methylhistidine determined by Bienvenut et al is assumed to be the tele-methylhistidine isomer by similarity to the mouse ortholog. Oxidation of Met-44 and Met-47 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-84 (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. **DISEASE:** Deafness, autosomal dominant, 20 (DFNA20) [MIM:604717]: A form of non-syndromic sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information. Note=The disease is caused by mutations affecting the gene represented in this entry. Baraitser-Winter syndrome 2 (BRWS2) [MIM:614583]: A rare developmental disorder characterized by the combination of congenital ptosis, high-arched eyebrows, hypertelorism, ocular colobomata, and a brain malformation consisting of anterior-predominant lissencephaly. Other typical features include postnatal short stature and microcephaly, intellectual disability, seizures, and hearing loss. Note=The disease is caused by mutations affecting the gene represented in this entry. **Similarity:** Belongs to the actin family.

SWISS:
P63261

Gene ID:
71

Database links:

Entrez Gene: 415296Chicken

Entrez Gene: 71Human

Entrez Gene: 11465Mouse

Entrez Gene: 100361457Rat

Entrez Gene: 287876Rat

Entrez Gene: 57935Zebrafish

Omim: 102560Human

SwissProt: Q5ZMQ2Chicken

SwissProt: P63261Human

SwissProt: P63260Mouse

SwissProt: P63259Rat

SwissProt: Q7ZVF9Zebrafish

Unigene: 514581Human

Unigene: 196173Mouse

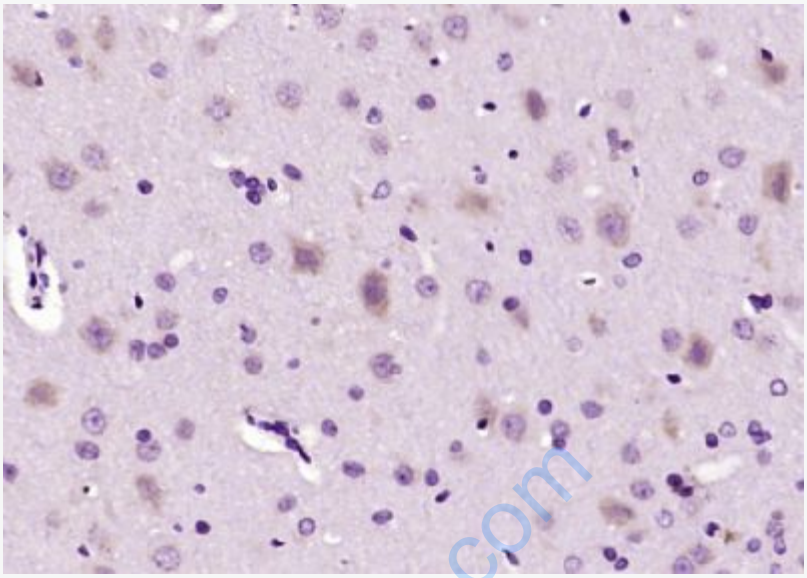
Unigene: 426706Mouse

Unigene: 101464Rat

Unigene: 106826Rat

Unigene: 155448Zebrafish

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

Picture:	 Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ACTG1) Polyclonal Antibody, Unconjugated (SL10968R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.