

Immunotag™ α-SMA Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT5120
Product Description	Immunotag™ α-SMA Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	α-SMA
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the C-terminal region of human α-SMA
Specificity	α-SMA Polyclonal Antibody detects endogenous levels of α-SMA protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	ACTA1/ACTA2/ACTC1
Accession No.	P68133 P68134 P68136
Alternate Names	ACTA1; ACTA; Actin, alpha skeletal muscle; Alpha-actin-1; ACTA2; ACTSA; ACTVS; GIG46; Actin, aortic smooth muscle; Alpha-actin-2; Cell growth-inhibiting gene 46 protein; ACTC1; ACTC; Actin, alpha cardiac muscle 1; Alpha-cardiac actinACTA1; ACTA; Actin, alpha skeletal muscle; Alpha-actin-1; ACTA2; ACTSA; ACTVS; GIG46; Actin, aortic smooth muscle; Alpha-actin-2; Cell growth-inhibiting gene 46 protein; ACTC1; ACTC; Actin, alpha cardiac muscle 1; Alpha-cardiac actin

Antibody Specification

Description	actin, alpha 1, skeletal muscle(ACTA1) Homo sapiens The product encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, while beta and gamma actins are involved in the regulation of cell motility. This actin is an alpha actin that is found in skeletal muscle. Mutations in this gene cause nemaline myopathy type 3, congenital myopathy with excess of thin myofilaments, congenital myopathy with cores, and congenital myopathy with fiber-type disproportion, diseases that lead to muscle fiber defects. [provided by RefSeq, Jul 2008],
Protein Expression	Epithelium,Skeletal muscle,
Subcellular Localization	stress fiber,extracellular space,cytosol,striated muscle thin filament,actin filament,actin cytoskeleton,sarcomere,lamellipodium,filopodium,cell body,extracellular exosome,blood microparticle,
Protein Function	disease:Defects in ACTA1 are a cause of congenital myopathy with excess of thin myofilaments (CM) [MIM:102610].,disease:Defects in ACTA1 are a cause of congenital myopathy with fiber-type disproportion (CFTD) [MIM:255310]; also known as congenital fiber-type disproportion myopathy (CFTDM). CFTD is a genetically heterogeneous disorder in which there is relative hypotrophy of type 1 muscle fibers compared to type 2 fibers on skeletal muscle biopsy. However, these findings are not specific and can be found in many different myopathic and neuropathic conditions.,disease:Defects in ACTA1 are the cause of nemaline myopathy type 3 (NEM3) [MIM:161800]. Nemaline myopathy (NEM) is a form of congenital myopathy characterized by abnormal thread- or rod-like structures in muscle fibers on histologic examination. The clinical phenotype is highly variable, with differing age at onset and severity.,function:Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.,miscellaneous: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.,similarity:Belongs to the actin family.,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. Interacts with TTID.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.