



## $\alpha$ -SMA Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-03223
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	ACTA1/ACTA2/ACTC1
<b>Protein Name</b>	Actin alpha skeletal muscle/Actin aortic smooth muscle/Actin alpha cardiac muscle 1
<b>Immunogen</b>	Synthesized peptide derived from the C-terminal region of human $\alpha$ -SMA.
<b>Specificity</b>	$\alpha$ -SMA Monoclonal Antibody detects endogenous levels of $\alpha$ -SMA protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	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
<b>Observed Band</b>	42kD
<b>Cell Pathway</b>	Cytoplasm, cytoskeleton.
<b>Tissue Specificity</b>	Epithelium,Skeletal muscle,
<b>Function</b>	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.,func

#### Background

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],

#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western Blot analysis of various cells using  $\alpha$ -SMA Monoclonal Antibody