



# $\alpha$ skeletal muscle actin Monoclonal Antibody(4B11)

<b>Catalog No</b>	BYab-02987
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;IP
<b>Gene Name</b>	ACTA1
<b>Protein Name</b>	Actin alpha skeletal muscle
<b>Immunogen</b>	Synthetic Peptide of $\alpha$ skeletal muscle actin
<b>Specificity</b>	The antibody detects endogenous $\alpha$ Skeletal Muscle Actin protein.
<b>Formulation</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB: 1:500-10000 IP:1:200 IF 1:200 IHC 1:50-300
<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
<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,

Nanjing BYabscience technology Co.,Ltd



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**

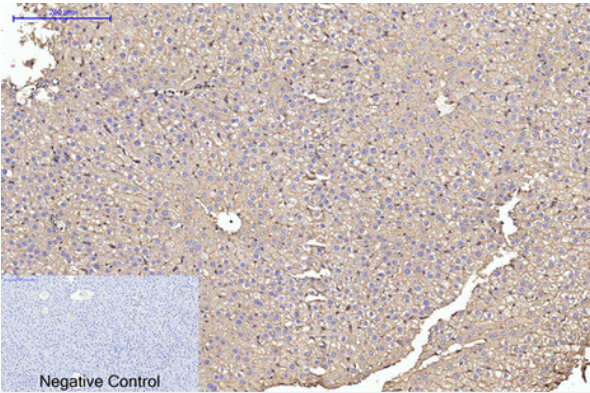
Avoid repeated freezing and thawing!

**Usage suggestions**

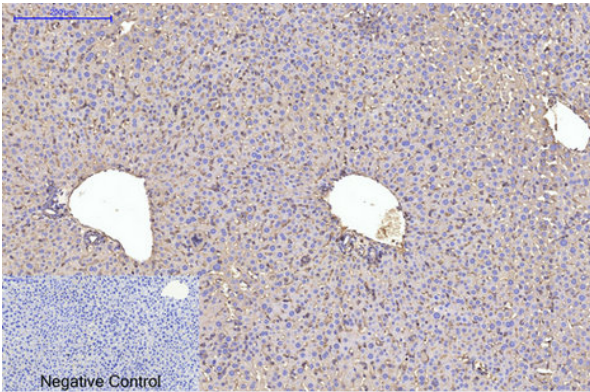
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



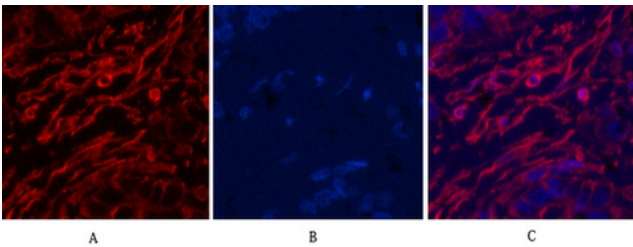
## Products Images



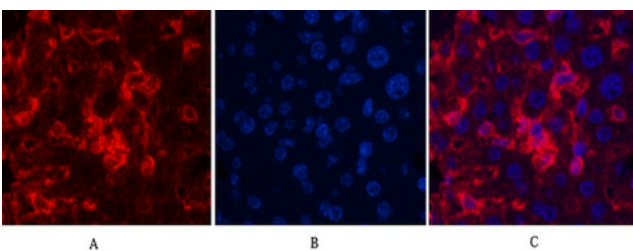
Immunohistochemical analysis of paraffin-embedded Rat-liver tissue. 1,  $\alpha$  skeletal muscle actin Monoclonal Antibody(4B11) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



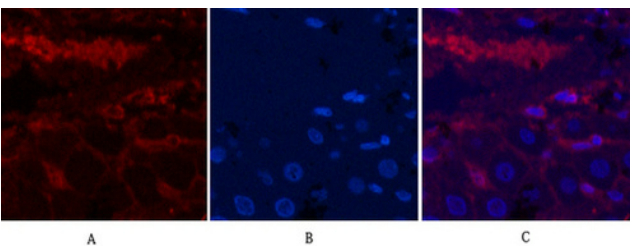
Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1,  $\alpha$  skeletal muscle actin Monoclonal Antibody(4B11) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Human-liver-cancer tissue. 1,  $\alpha$  skeletal muscle actin Monoclonal Antibody(4B11)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Mouse-liver tissue. 1,  $\alpha$  skeletal muscle actin Monoclonal Antibody(4B11)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Rat-liver tissue. 1,  $\alpha$  skeletal muscle actin Monoclonal Antibody(4B11)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

**Nanjing BYabscience technology Co.,Ltd**



**Nanjing BYabscience technology Co.,Ltd**

网址: [www.njbybio.com](http://www.njbybio.com)

官方热线: 025-5229-8998

监督电话: 15950492658