

Actin a1 Polyclonal Antibody

Catalog No: YT0097

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: Actin α1

Gene Name: ACTA1

Protein Name: Actin alpha skeletal muscle

P68133

P68134

Human Gene Id: 58

Human Swiss Prot

No:

Mouse Gene Id: 11459

Mouse Swiss Prot

No:

Rat Gene ld: 29437

Rat Swiss Prot No: P68136

Immunogen: The antiserum was produced against synthesized peptide derived from human

Actin-alpha-1. AA range:1-50

Specificity: Actin a1 Polyclonal Antibody detects endogenous levels of Actin a1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 45kD

Cell Pathway: Adherens_Junction

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],

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.,func

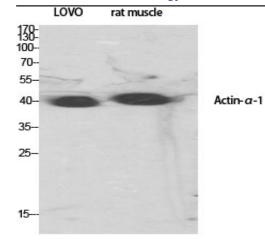
Subcellular Location:

Cytoplasm, cytoskeleton.

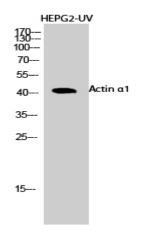
Expression : Epithelium, Skeletal muscle,

Products Images

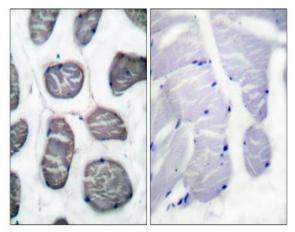
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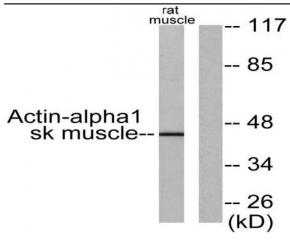
Western Blot analysis of various cells using Actin $\alpha 1$ Polyclonal Antibody diluted at 1:500



Western Blot analysis of HEPG2-UV cells using Actin $\alpha 1$ Polyclonal Antibody diluted at 1:500



Immunohistochemistry analysis of paraffin-embedded human muscle tissue, using Actin-alpha-1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from rat muscle cells, using Actinalpha-1 Antibody. The lane on the right is blocked with the synthesized peptide.