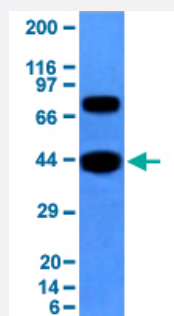


Actin (muscle specific) monoclonal antibody, clone MSA/953

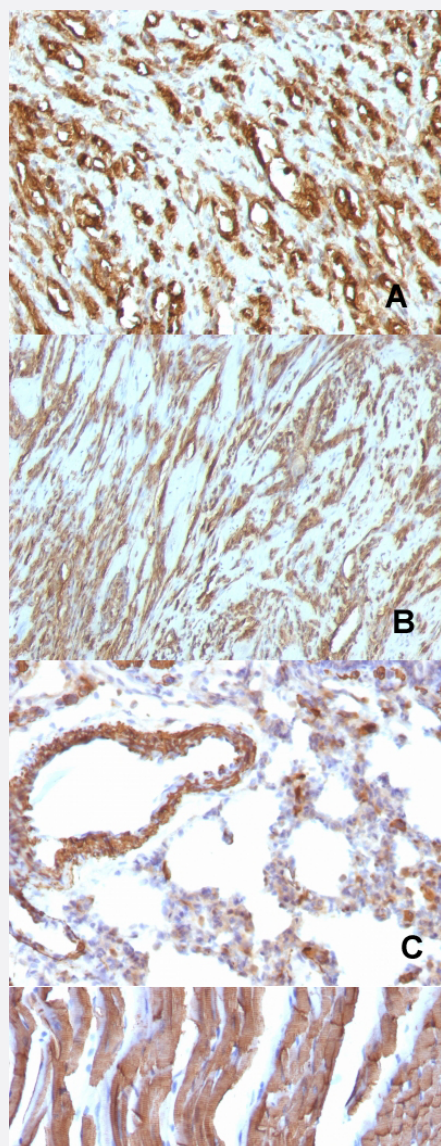
Catalog # MAB14633 Size 100 ug

Applications



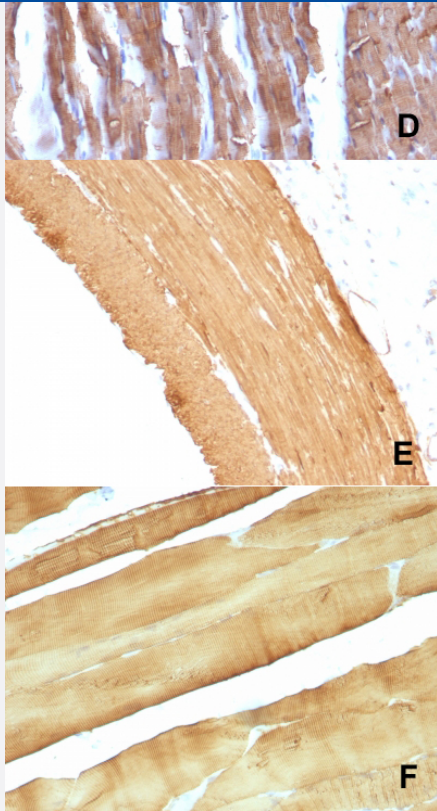
Western Blot (Cell lysate)

Western Blot analysis of hSKM cell lysate with Actin (muscle specific) monoclonal antibody, clone MSA/953 (Cat # MAB14633).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of (A) human rhabdomyosarcoma (B) human leiomyosarcoma (C) rat lung (D) rat heart (E) rat stomach and (F) rat skeletal muscle with Actin (muscle specific) monoclonal antibody, clone MSA/953 (Cat # MAB14633).



Specification

Product Description	Mouse monoclonal antibody raised against synthetic peptide of human muscle actin.
Immunogen	A synthetic peptide corresponding to human muscle actins.
Host	Mouse
Reactivity	Human, Rat
Specificity	This antibody recognizes actin of skeletal, cardiac, and smooth muscle cells. It is not reactive with other mesenchymal cells except for myoepithelium.
Form	Liquid
Purification	Protein A/G purification
Isotype	IgG1, kappa
Recommend Usage	Flow Cytometry (0.5-1 ug/million cells in 0.1 mL) Immunofluorescence (0.5-1 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.25-0.5 ug/mL) Western Blot (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In 10 mM PBS (0.05% BSA and 0.05% azide).

Storage Instruction

Store at 4°C.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western Blot analysis of hSKM cell lysate with Actin (muscle specific) monoclonal antibody, clone MSA/953 (Cat # MAB14633).

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of (A) human rhabdomyosarcoma (B) human leiomyosarcoma (C) rat lung (D) rat heart (E) rat stomach and (F) rat skeletal muscle with Actin (muscle specific) monoclonal antibody, clone MSA/953 (Cat # MAB14633).

- Immunofluorescence

- Flow Cytometry

Gene Info — ACTA1

Entrez GeneID

[58](#)

Protein Accession#

[P62736; P68032; P68133](#)

Gene Name

ACTA1

Gene Alias

ACTA, ASMA, CFTD, CFTD1, CFTDM, MPFD, NEM1, NEM2, NEM3

Gene Description

actin, alpha 1, skeletal muscle

Omim ID

[102610 161800 255310](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

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]

Other Designations

OTTHUMP00000036123|alpha skeletal muscle actin

Gene Info — ACTA2

Entrez GeneID	59
Protein Accession#	P62736; P68032; P68133
Gene Name	ACTA2
Gene Alias	AAT6, ACTSA
Gene Description	actin, alpha 2, smooth muscle, aorta
Omim ID	102620
Gene Ontology	Hyperlink
Gene Summary	<p>The protein 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. Defects in this gene cause aortic aneurysm familial thoracic type 6. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq]</p>
Other Designations	OTTHUMP00000020042 alpha 2 actin alpha-cardiac actin growth-inhibiting gene 46

Gene Info — ACTC1

Entrez GeneID	70
Protein Accession#	P62736; P68032; P68133
Gene Name	ACTC1
Gene Alias	ACTC, CMD1R, CMH11
Gene Description	actin, alpha, cardiac muscle 1
Omim ID	102540 192600
Gene Ontology	Hyperlink

Gene Summary

Actins are highly conserved proteins that are involved in various types of cell motility. 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 four others. The protein encoded by this gene belongs to the actin family which is comprised of three main groups of actin isoforms, alpha, beta, and gamma. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. Defects in this gene have been associated with idiopathic dilated cardiomyopathy (IDC) and familial hypertrophic cardiomyopathy (FHC). [provided by RefSeq]

Other Designations

cardiac muscle alpha actin 1

Publication Reference

- [Actin cytoskeleton. Setting the pace of cell movement.](#)

Barkalow K, Hartwig JH.

Current Biology 1995 Sep; 5(9):1000.

Application: IF, IHC, WB-Ce, WB-Ti, WB-Tr, Human, Mouse, Mammalian cells, Tissues

Pathway

- [Cardiac muscle contraction](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)
- [Vascular smooth muscle contraction](#)

Disease

- [Acute Disease](#)
- [Alzheimer disease](#)
- [Alzheimer Disease](#)
- [Atherosclerosis](#)
- [Calcinosis](#)
- [Cardiomegaly](#)
- [Cardiomyopathies](#)
- [Cardiomyopathy](#)

- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Myocardial Infarction](#)
- [Myopia](#)
- [Parkinson disease](#)