

ARG66986 anti-Desmin antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes Desmin
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Target Name	Desmin
Conjugation	Un-conjugated
Alternate Names	LGMD2R; CSM1; Desmin; CSM2

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Heart; C2C12	
Observed Size	~ 54 kDa	

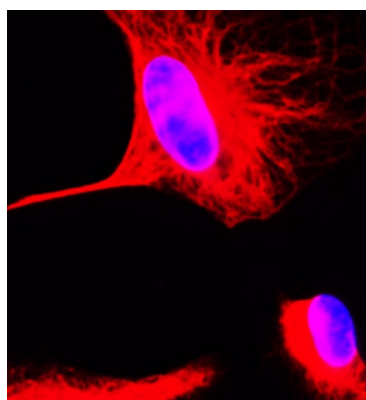
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.2) and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

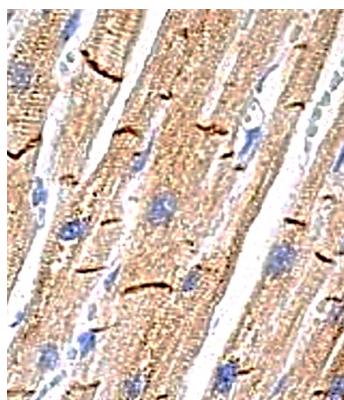
Gene Symbol	DES
Gene Full Name	desmin
Background	This gene encodes a muscle-specific class III intermediate filament. Homopolymers of this protein form a stable intracytoplasmic filamentous network connecting myofibrils to each other and to the plasma membrane. Mutations in this gene are associated with desmin-related myopathy, a familial cardiac and skeletal myopathy (CSM), and with distal myopathies. [provided by RefSeq, Jul 2008]
Function	Muscle-specific type III intermediate filament essential for proper muscular structure and function. Plays a crucial role in maintaining the structure of sarcomeres, inter-connecting the Z-disks and forming the myofibrils, linking them not only to the sarcolemmal cytoskeleton, but also to the nucleus and mitochondria, thus providing strength for the muscle fiber during activity (PubMed:25358400). In adult striated muscle they form a fibrous network connecting myofibrils to each other and to the plasma membrane from the periphery of the Z-line structures (PubMed:24200904, PubMed:25394388, PubMed:26724190). May act as a sarcomeric microtubule-anchoring protein: specifically associates with detyrosinated tubulin-alpha chains, leading to buckled microtubules and mechanical resistance to contraction. Contributes to the transcriptional regulation of the NKX2-5 gene in cardiac progenitor cells during a short period of cardiomyogenesis and in cardiac side population stem cells in the adult. Plays a role in maintaining an optimal conformation of nebulin (NEB) on heart muscle sarcomeres to bind and recruit cardiac alpha-actin (By similarity). [UniProt]
Calculated Mw	54 kDa
PTM	ADP-ribosylation prevents ability to form intermediate filaments. [UniProt]
Cellular Localization	Cytoplasm, myofibril, sarcomere, Z line. Cytoplasm. Cell membrane, sarcolemma. Nucleus. Note=Localizes in the intercalated disks which occur at the Z line of cardiomyocytes (PubMed:24200904, PubMed:26724190). Localizes in the nucleus exclusively in differentiating cardiac progenitor cells and premature cardiomyocytes (By similarity). [UniProt]

Images



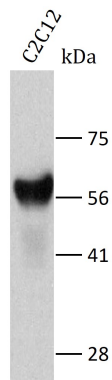
ARG66986 anti-Desmin antibody ICC/IF image

Immunofluorescence: SJRH30 cells were fixed with 4% paraformaldehyde at RT for 10 min, permeabilized with 0.1% NP-40 at RT for 10 min and then cells were blocked with 5% BSA at RT for 30 min and stained with ARG66986 anti-Desmin antibody (red) at 1:200 dilution at 4°C for overnight. DAPI (blue) was used for nuclear staining.



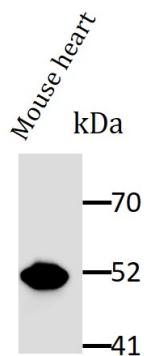
ARG66986 anti-Desmin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human heart tissue stained with ARG66986 anti-Desmin antibody at 1:100 dilution.



ARG66986 anti-Desmin antibody WB image

Western blot: 50 µg of C2C12 cell lysate stained with ARG66986 anti-Desmin antibody at 1:1000 dilution, overnight at 4°C.



ARG66986 anti-Desmin antibody WB image

Western blot: 50 µg of Mouse heart tissue lysate stained with ARG66986 anti-Desmin antibody at 1:1000 dilution, overnight at 4°C.