

## ARG64787 anti-Desmin antibody

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Goat Polyclonal antibody recognizes Desmin
Tested Reactivity	Hu, Ms, Rat, Pig
Predict Reactivity	Cow, Dog
Tested Application	IHC-P, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	Desmin
Species	Human
Immunogen	C-RDGEVVSEATQQQHE
Conjugation	Un-conjugated
Alternate Names	LGMD2R; CSM1; Desmin; CSM2

### Application Instructions

Application table	Application	Dilution
	IHC-P	Assay - dependent
	WB	0.3 - 1 µg/ml

**Application Note**  
WB: Recommend incubate at RT for 1h.  
IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0).  
\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
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 Full Name

desmin

Background

Desmin is 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

Desmin: 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 deetyrosinated 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. [UniProt]

Research Area

Cancer antibody; Cell Biology and Cellular Response antibody; Developmental Biology antibody; Signaling Transduction antibody; Smooth Muscle Marker antibody; Cardiomyocyte Cell Surface Marker antibody; Mural Cell Marker antibody; Microvascular Density Study antibody

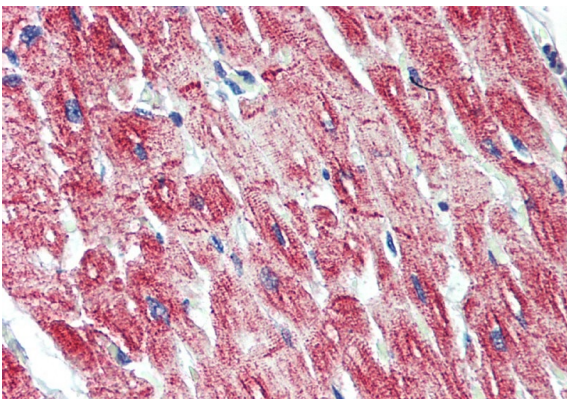
Calculated Mw

54 kDa

PTM

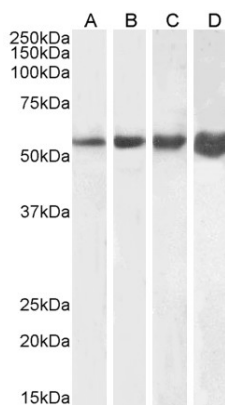
ADP-ribosylation prevents ability to form intermediate filaments.

## Images



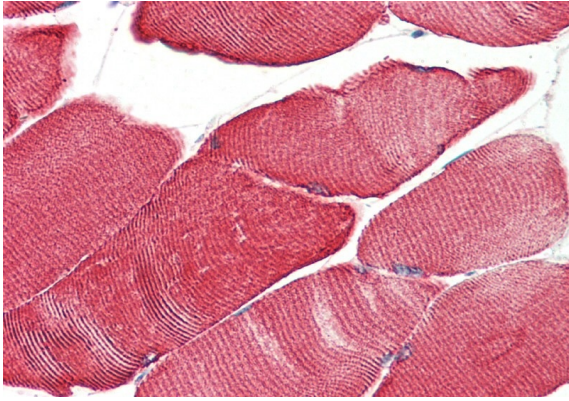
ARG64787 anti-Desmin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human heart tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG64787 anti-Desmin antibody at 5  $\mu$ g/ml dilution followed by AP-staining.



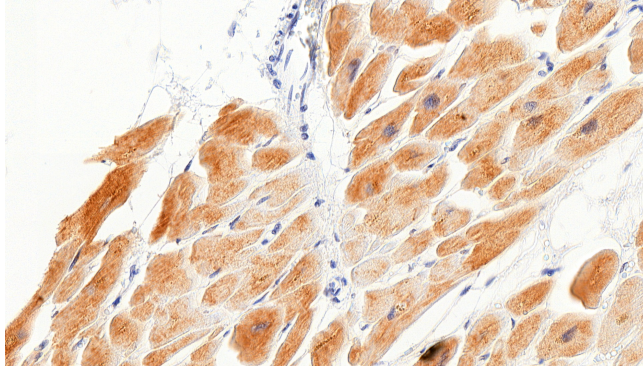
ARG64787 anti-Desmin antibody WB image

Western blot: 35  $\mu$ g of Human (A), Mouse (B), Rat (C) and Pig (D) skeletal muscle lysates (in RIPA buffer) stained with ARG64787 anti-Desmin antibody at 1  $\mu$ g/ml dilution and incubated at RT for 1 hour.



ARG64787 anti-Desmin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human skeletal muscle tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG64787 anti-Desmin antibody at 5  $\mu$ g/ml dilution followed by AP-staining.



ARG64787 anti-Desmin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human heart tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0). The tissue section was stained with ARG64787 anti-Desmin antibody at 3.75  $\mu$ g/ml dilution followed by HRP-staining.