# ARG43208
# anti-Desmin antibody [DE-U-10]

Package: 50 µg
Store at: -20°C

## Summary

| | |
|---|---|
| Product Description | Mouse Monoclonal antibody [DE-U-10] recognizes Desmin |
| Tested Reactivity | Ms, Rat |
| Predict Reactivity | Hu |
| Tested Application | ICC/IF, IHC-P, WB |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | DE-U-10 |
| Isotype | IgG1 |
| Target Name | Desmin |
| Species | Pig |
| Immunogen | Desmin from pig stomach. |
| Conjugation | Un-conjugated |
| Alternate Names | LGMD2R; CSM1; Desmin; CSM2 |

## Application Instructions

Application table

| Application | Dilution |
|---|---|
| ICC/IF | Assay-dependent |
| IHC-P | 2 - 4 µg/ml |
| WB | 2 µg/ml |

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 54 kDa

## Properties

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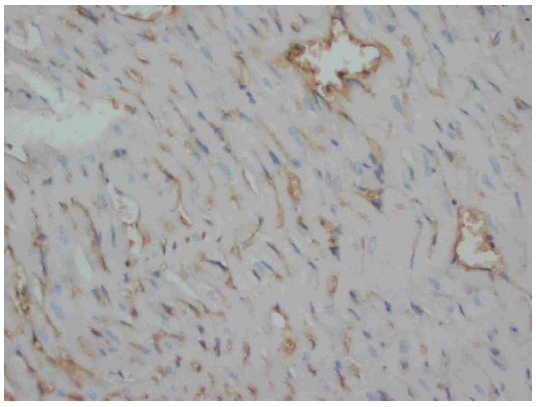
| Form | Liquid |
| Purification | Unpurified |
| Buffer | Mouse ascites fluid, 1.2% Sodium acetate, 0.01 mg Sodium azide and 2 mg BSA. |
| Preservative | 0.01 mg Sodium azide |
| Stabilizer | 2 mg BSA |
| Concentration | 0.5 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody 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

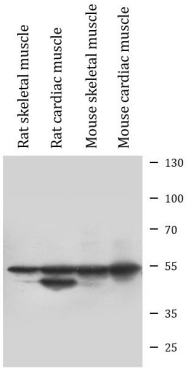
| | |
|---|---|
| Gene Symbol | DES |
| Gene Full Name | desmin |
| Background | This gene encodes a muscle-specific class III intermediate filament. Homopolymers of this protein form a stable intracytoplasmic filamentous network connecting myofibrils to each other and to the plasma membrane. Mutations 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 nebulette (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



ARG43208 anti-Desmin antibody [DE-U-10] IHC-P image

Immunohistochemistry: Paraffin-embedded Rat cardiac muscle tissue stained with ARG43208 anti-Desmin antibody [DE-U-10].




ARG43208 anti-Desmin antibody [DE-U-10] WB image

Western blot: 50 µg of Rat skeletal muscle, Rat cardiac muscle, Mouse skeletal muscle and Mouse cardiac muscle lysates stained with ARG43208 anti-Desmin antibody [DE-U-10] at 0.5 µg/ml dilution.