

## ARG52941 anti-Desmin antibody

Package: 500 μl, 250 μl Store at: -20°C

## Summary

| Product Description | Rabbit Polyclonal antibody recognizes Desmin                   |
|---------------------|--|
| Tested Reactivity   | Hu, Ms, Rat  |
| Tested Application  | IHC-P, IP, WB  |
| Host                | Rabbit   |
| Clonality           | Polyclonal   |
| lsotype             | IgG  |
| Target Name         | Desmin   |
| Species             | Human  |
| Immunogen           | Synthetic peptide mapping near the C-terminus of human desmin. |
| Conjugation         | Un-conjugated  |
| Alternate Names     | LGMD2R; CSM1; Desmin; CSM2                                     |

## **Application Instructions**

| Application table | Application   | Dilution   |
|-------------------|---|--|
|                   | IHC-P   | 1:200  |
|                   | IP  | Assay-Dependent  |
|                   | WB  | Assay-dependent  |
| Application Note  | IHC-P:<br>Incubation Time: 10 min at RT.<br>* The dilutions indicate recomm<br>should be determined by the sc | nended starting dilutions and the optimal dilutions or concentrations ientist. |
| Positive Control  | Sarcomas, Skeletal Muscle   |  |

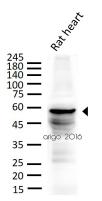
## Properties

| Form                | Liquid  |
|---------------------|---|
| Purification        | Immunogen affinity purified   |
| Buffer              | PBS (pH 7.6), 1% BSA and < 0.1% Sodium azide  |
| Preservative        | < 0.1% Sodium azide   |
| Stabilizer          | 1% BSA  |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot<br>and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated<br>freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed<br>before use. |

# Bioinformation

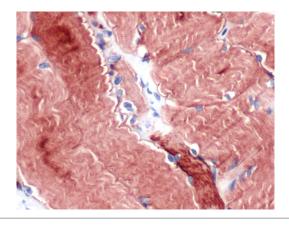
| Gene Full Name<br>Background                  | desmin<br>Desmin is a muscle-specific class III intermediate filament. Homopolymers of this protein form a stable<br>intracytoplasmic filamentous network connecting myofibrils to each other and to the plasma membrane.<br>Mutations in this gene are associated with desmin-related myopathy, a familial cardiac and skeletal<br>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 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 rearwit eardiae adue action. |
| Highlight                                     | recruit cardiac alpha-actin. [UniProt]<br>Related Antibody Duos and Panels:<br><u>ARG30051 Smooth Muscle Marker Antibody Duo (Desmin, SMA)</u><br><u>ARG30142 Cardiomyocyte Cell Surface Marker Antibody Panel (Cx43, Desmin, SIRP)</u><br>Related products:<br><u>Desmin antibodies; Desmin Duos / Panels; Anti-Rabbit IgG secondary antibodies;</u><br>Related news:<br><u>Pericytes, new therapeutic target for Alzheimer's disease?</u>  |
| Research Area                                 | Cancer antibody; Cell Biology and Cellular Response antibody; Developmental Biology antibody; Signaling<br>Transduction antibody; Smooth Muscle Marker antibody; Cardiomyocyte Cell Surface Marker antibody;<br>Mural Cell Marker antibody; Microvascular Density Study antibody   |
| Calculated Mw<br>PTM<br>Cellular Localization | 54 kDa<br>ADP-ribosylation prevents ability to form intermediate filaments.<br>Cytoplasm   |

### Images



#### ARG52941 anti-Desmin antibody WB image

Western blot: 30  $\mu g$  of Rat heart lysate stained with ARG52941 anti-Desmin antibody at 1:500 dilution.



### ARG52941 anti-Desmin antibody IHC-P image

Immunohistochemistry: Human Skeletal Muscle stained with ARG52941 anti-Desmin antibody