



**Desmin** 

Mouse Monoclonal Antibody (Mab)
Catalog # APA025

# **Specification**

### **Desmin - Product Information**

Application IHC
Primary Accession P17661
Host Mouse
Clonality Monoclonal
Calculated MW 53536 Da

### **Desmin - Additional Information**

Gene ID 1674
Gene Name DES
Other Names

Dilution IHC~~1:100~500

Desmin, DES

Storage Maintain refrigerated at 2-8°C for up to 2

weeks. For long term storage store at -20°C in small aliquots to prevent

freeze-thaw cycles.

Precautions Desmin is for research use only and not for

use in diagnostic or therapeutic

procedures.

#### **Desmin - Protein Information**

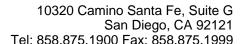
**Name DES** 

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,





Cellular Location

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). Cytoplasm, myofibril, sarcomere, Z line. Cytoplasm. Cell membrane, sarcolemma. Nucleus {ECO:0000250|UniProtKB:P31001} 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) {ECO:0000250|UniProtKB:P31001, ECO:0000269|PubMed:24200904, ECO:0000269|PubMed:26724190}

## **Desmin - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

**Desmin - Images**