SunLong Biotech Co.,LTD
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**[ Primary Antibody ]**

# Rabbit Anti-Desmin antibody

**Catalog Number: SLM-60266R**

**FOR RESEARCH USE ONLY**

**[ DATASHEET ]**

| | |
|---|---|
| **Host:** | Rabbit |
| **Isotype:** | IgG |
| **Clonality:** | Monoclonal |
| **Target:** | Desmin |
| **Immunogen:** | KLH conjugated synthetic peptide derived from human Desmin |
| **Purification:** | affinity purified by Protein A |
| **Concentration:** | 1mg/ml |
| **Storage:** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. |
| **Applications:** | WB=1:1000-5000<br>IHC-P=1:200-800<br>IHC-F=1:200-800<br>ICC/IF=1:100-500<br>IF=1:200-800 （Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Reactivity:** | Human,Mouse,Rat |
| **Predicted MW.:** | 52kDa |
| **Subcellular Location:** | cytoplasmic |
| **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]<br>**Function:** Desmin are class-III intermediate filaments found in muscle cells. 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.<br>**Subunit:** Homopolymer. Interacts with DST. Interacts with MTM1. |

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**Subcellular Location:** Cytoplasm.
**Post-translational modifications:** ADP-ribosylation prevents ability to form intermediate filaments.
DISEASE: Defects in DES are the cause of myopathy myofibrillar type 1 (MFM1) [MIM:601419]. A neuromuscular disorder characterized by skeletal muscle weakness associated with cardiac conduction blocks, arrhythmias, restrictive heart failure, and by myofibrillar destruction with intracytoplasmic accumulation of desmin-reactive deposits in cardiac and skeletal muscle cells. Note=Mutations in the DES gene are associated with a variable clinical phenotype which encompasses isolated myopathies, pure cardiac phenotypes (including dilated cardiomyopathy, restrictive cardiomyopathy and arrhythmogenic right ventricular cardiomyopathy), cardiac conduction disease, and combinations of these disorders.
If both cardiologic and neurologic features occur, they can manifest in any order, as cardiologic features can precede, occur simultaneously with, or follow manifestation of generalized neuromuscular disease (PubMed:19879535).
Defects in DES are the cause of cardiomyopathy dilated type 1I (CMD1I) [MIM:604765]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.
Defects in DES are the cause of neurogenic scapuloperoneal syndrome Kaeser type (Kaeser syndrome) [MIM:181400]. Kaeser syndrome is an autosomal dominant disorder with a peculiar scapuloperoneal distribution of weakness and atrophy. A large clinical variability is observed ranging from scapuloperoneal, limb grindle and distal phenotypes with variable cardiac or respiratory involvement. Facial weakness, dysphagia and gynaecomastia are frequent additional symptoms. Affected men seemingly bear a higher risk of sudden, cardiac death as compared to affected women. Histological and immunohistochemical examination of muscle biopsy specimens reveal a wide spectrum of findings ranging from near normal or unspecific pathology to typical, myofibrillar changes with accumulation of desmin.
**Similarity:** Belongs to the intermediate filament family.
**Database links:**
**Entrez Gene:** 1674 Human
**Entrez Gene:** 13346 Mouse
**Entrez Gene:** 64362 Rat
**SwissProt:** P17661 Human
**SwissProt:** P31001 Mouse
**SwissProt:** P48675 Rat

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## [ VALIDATION IMAGES ]

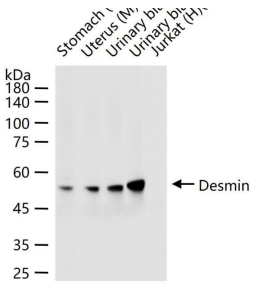



Figure 1. 25 ug total protein per lane of various lysates (see on figure) probed with Desmin monoclonal antibody, unconjugated (SLM-60266R) at 1:5000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min

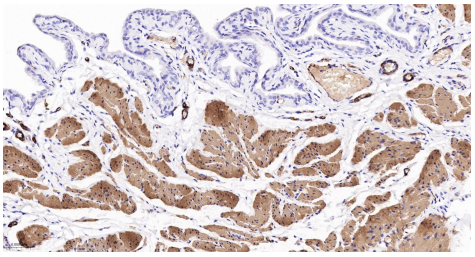


Figure 2. Paraformaldehyde-fixed, paraffin embedded Mouse Bladder; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

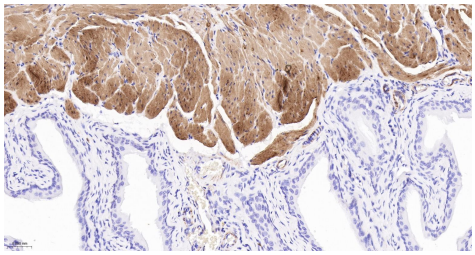


Figure 3. Paraformaldehyde-fixed, paraffin embedded Rat Bladder; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

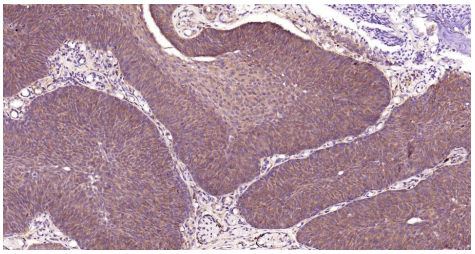


Figure 4. Paraformaldehyde-fixed, paraffin embedded Human Bladder; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

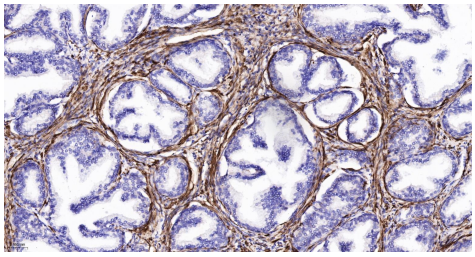


Figure 5. Paraformaldehyde-fixed, paraffin embedded Human Prostate Tumor; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

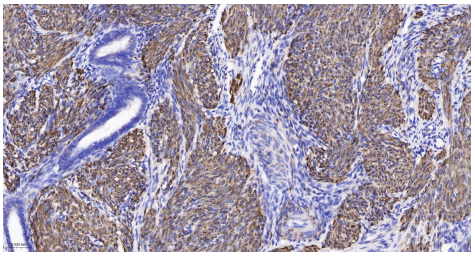


Figure 6. Paraformaldehyde-fixed, paraffin embedded Human Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

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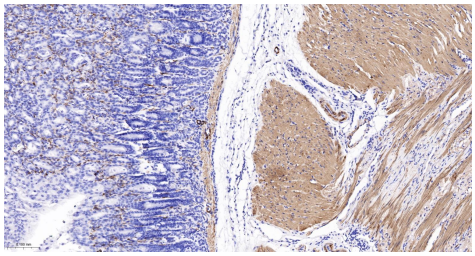


Figure 7. Paraformaldehyde-fixed, paraffin embedded Mouse Stomach; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

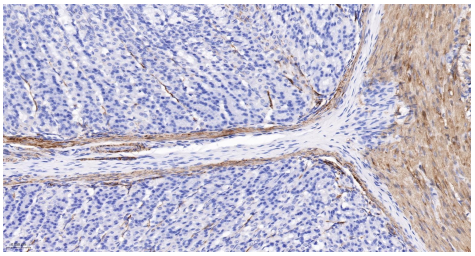


Figure 8. Paraformaldehyde-fixed, paraffin embedded Rat Stomach; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

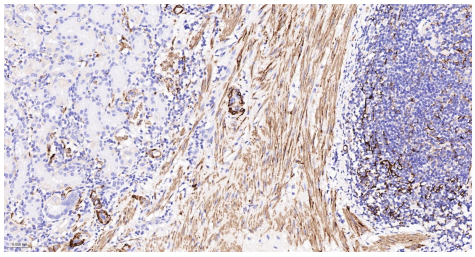


Figure 9. Paraformaldehyde-fixed, paraffin embedded Human Stomach; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

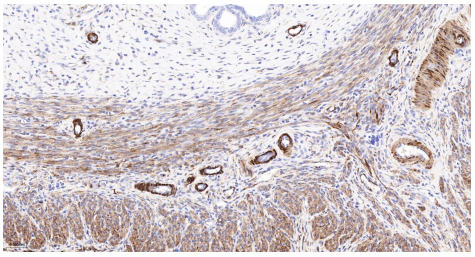


Figure 10. Paraformaldehyde-fixed, paraffin embedded Rat Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

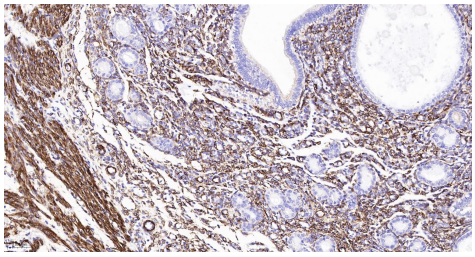


Figure 11. Paraformaldehyde-fixed, paraffin embedded Mouse Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

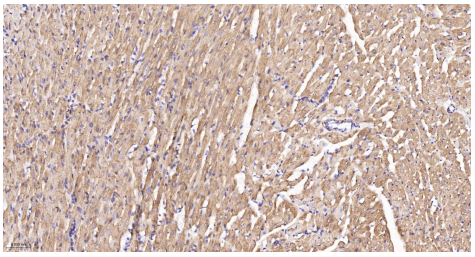


Figure 12. Paraformaldehyde-fixed, paraffin embedded Rat Heart; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

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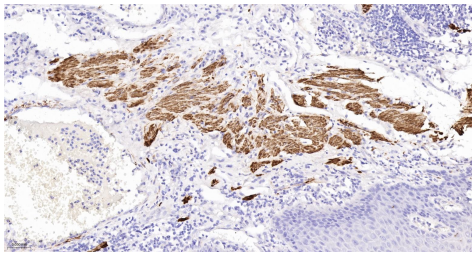


Figure 13. Paraformaldehyde-fixed, paraffin embedded Human Esophageal Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

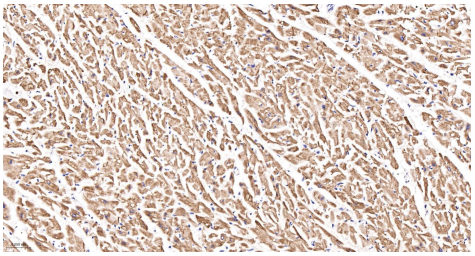


Figure 14. Paraformaldehyde-fixed, paraffin embedded Human Heart; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

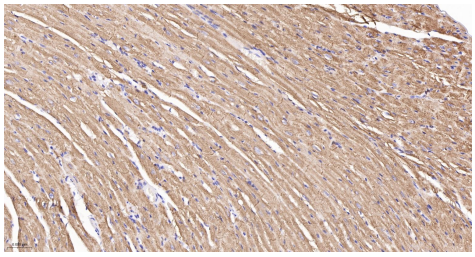


Figure 15. Paraformaldehyde-fixed, paraffin embedded Mouse Heart; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

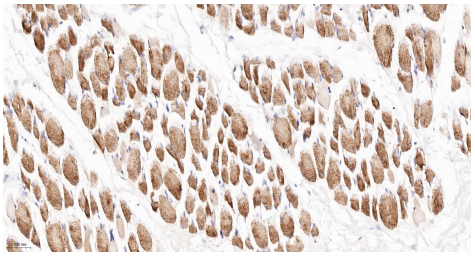


Figure 16. Paraformaldehyde-fixed, paraffin embedded Human Skeletal muscle; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

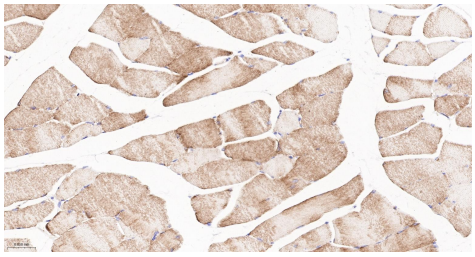


Figure 17. Paraformaldehyde-fixed, paraffin embedded Rat Skeletal muscle; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

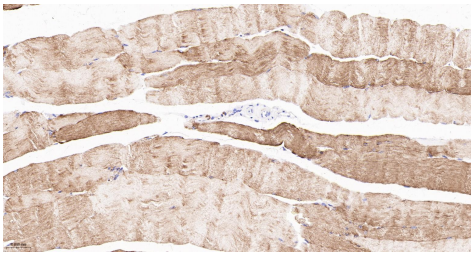


Figure 18. Paraformaldehyde-fixed, paraffin embedded Mouse Skeletal muscle; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Desmin Monoclonal Antibody, Unconjugated(SLM-60266R) at 1:200 overnight at 4°C, followed by conjugation to the SL0295G-HRP and DAB (C-0010) staining

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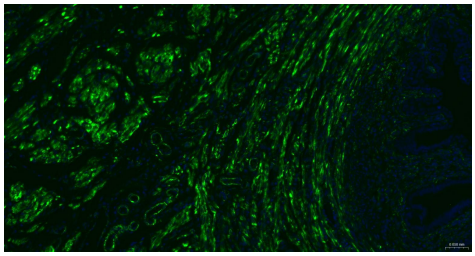


Figure 19. Paraformaldehyde-fixed, paraffin embedded Mouse Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Desmin Monoclonal Antibody, Unconjugated (SLM-60266R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (Green, SL0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei

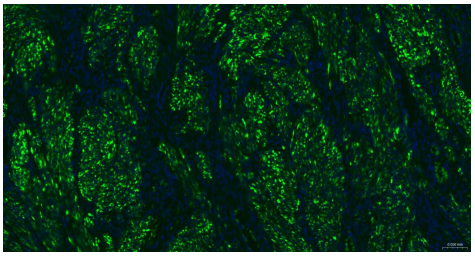


Figure 20. Paraformaldehyde-fixed, paraffin embedded Human Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Desmin Monoclonal Antibody, Unconjugated (SLM-60266R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (Green, SL0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei

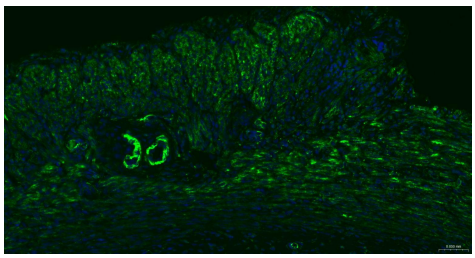


Figure 21. Paraformaldehyde-fixed, paraffin embedded Rat Uterus; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Desmin Monoclonal Antibody, Unconjugated (SLM-60266R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (Green, SL0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei

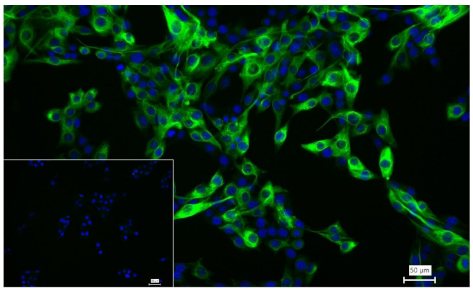


Figure 22. 4% Paraformaldehyde-fixed C2C12 (M) cell; Triton X-100 at r.t. for 20 min; Antibody incubation with (Desmin) monoclonal Antibody, unconjugated (SLM-60266R) 1:100, 90 min at 37°C; followed by conjugated Goat Anti-Rabbit IgG antibody (green, SL40295G-FITC) at 37°C for 90 min, DAPI (blue, C02-04002) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control

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