

DESCRIPTION

| | |
|---------------------------|---|
| Species Reactivity | Human/Mouse |
| Specificity | Detects human and mouse Desmin. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant human Desmin Val261-Leu470 Accession # P17661 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

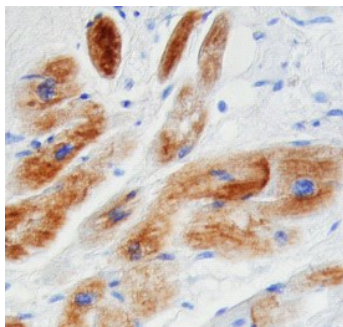
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------------|----------------------------------|---------------|
| Immunohistochemistry | 5-15 µg/mL | See Below |

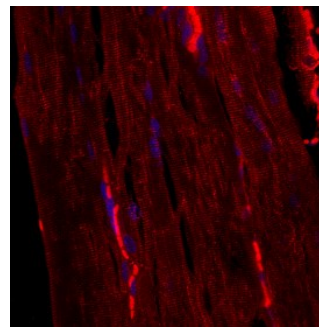
DATA

Immunohistochemistry



Desmin in Human Heart. Desmin was detected in immersion fixed paraffin-embedded sections of human heart using 15 µg/mL Human Desmin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3844) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to the sarcoplasm of cardiomyocytes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunohistochemistry



Desmin in Mouse Skeletal Muscle. Desmin was detected in immersion fixed frozen sections of mouse skeletal muscle using Human Desmin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3844) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to z-lines. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Reconstitute at 0.2 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Desmin is a 53 kDa, muscle-specific molecule that belongs to the intermediate filament superfamily of cytoskeletal proteins. Cytoplasmic Desmin homopolymers form stable filamentous networks that stabilize lateral alignments of myofibrils. Human Desmin is 470 amino acid (aa) peptide. It contains an N-terminal head segment (aa 1-84), multiple coiled regions (aa 109-412), and a tail region (aa 413-470). Single amino acid substitutions and three-amino acid deletions are associated with cardio-skeletal myopathies. Most mutations affect filament assembly. Desmin is a highly conserved protein. Over the region used as immunogen, human Desmin is 99% identical to the corresponding mouse, canine, and porcine protein sequences.