

## DESCRIPTION

|                           |  |
|---------------------------|--|
| <b>Species Reactivity</b> | Human  |
| <b>Specificity</b>        | Detects human Desmin in Western blots.   |
| <b>Source</b>             | Polyclonal Goat IgG  |
| <b>Purification</b>       | Antigen Affinity-purified  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human Desmin<br>Val261-Leu470<br>Accession # P17661                                    |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details. |

## 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.

|                     | <b>Recommended Concentration</b> | <b>Sample</b>            |
|---------------------|----------------------------------|--------------------------|
| <b>Western Blot</b> | 0.1 µg/mL                        | Recombinant Human Desmin |

## PREPARATION AND STORAGE

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

## 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 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.