

DES

Recombinant Human Desmin

Catalog No. CRD114A **Quantity**: 5 μg

CRD114B 20 μg CRD114C 1.0 mg

Alternate Names: Desmin, DES, CSM1, CSM2, CMD1I, FLJ12025, FLJ39719, FLJ41013, FLJ41793.

Description: Desmin is 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.

Gene ID: 1674

Source: E. coli

Molecular Mass: Recombinant Human Desmin has a calculated molecular mass of 53,539 Dalton and

shows a 55 kDa band by SDS PAGE. The pl is 5.16.

Formulation: Desmin was lyophilized from a 1 mg/ml solution containing 30 mM Tris-HCl, 9.5 M urea,

2 mM DTT, 2 mM EDTA, 10 mM methylammonium chloride.

Purity: >95.0% as determined by SDS-PAGE.

Physical Appearance: Sterile filtered lyophilized, white powder.

Reconstitution: Centrifuge vial prior to opening. It is recommended to reconstitute the lyophilized

Desmin in sterile 18 M Ω -cm H2O not less than 100 µg/ml, which can then be further

diluted to other aqueous solutions.

Reconstitution to

Filaments:

After Desmin is dissolved in 9.5M urea buffer (see formulation), protofilaments and filament complexes are obtained by dialyzing the resulting polypeptide solution stepwise

to a concentration of 4M urea and then to low salt condition (50mM NaCl, 2mM

dithiothreitol, 10mM Tris-HCl, pH 7.4). For immunization purposes, the solution can be further dialyzed against PBS (phosphate buffered saline, e.g. Dulbecco's PBS).

Storage & Stability: Lyophilized protein is stable at room temperature for 3 weeks, but it is recommended to

store the lyophilized product desiccated at -20°C to -80°C. Upon reconstitution, protein should be stored at 2-4°C for one week and for future use at -20°C to -80°C. Add a carrier protein (0.1% HSA or BSA) as a stabilizer for long term storage. **Please note that**

the addition of any carrier protein into this product may produce unwanted

endotoxin. This depends upon the particular application employed. Avoid repeated

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freeze-thaw cycles.

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