Recombinant DESM protein (His tag)

Catalog Number	542159
Species	Human
Expression System	E. coli
Accession	P17661
Molecular Weight	Predictes a molecular mass of 39.13 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	96-414
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 96-414 aa (P17661) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Desmin (96-414) is a high-quality, stable protein fragment designed for structural and biochemical studies. This 319-amino acid fragment retains key features of the full-length Desmin, offering researchers a soluble and functional unit for investigating muscle-specific intermediate filament dynamics and interactions. Desmin, encoded by the DES gene in humans, is a muscle-specific type III intermediate filament essential for maintaining muscular structure and function. It plays a critical role in organizing sarcomeres by interconnecting Z-disks, forming myofibrils, and linking them to the sarcolemmal cytoskeleton, nuclei, and mitochondria. This network provides mechanical strength during muscle activity and contributes to nuclear membrane integrity. Desmin also functions as a sarcomeric microtubule-anchoring protein, associates with detyrosinated tubulin-alpha chains, and is involved in transcriptional regulation during cardiomyogenesis. It localizes to the cytoplasm, myofibrils, sarcomere Z-lines, sarcolemma, nucleus (in differentiating cardiac progenitor cells), nuclear envelope, and cell tips, highlighting its multifaceted role in cellular architecture and muscle physiology.