

Datasheet for ABIN7547021

Desmin Protein (DES) (AA 1-470) (His tag)



Overview

Quantity:	1 mg
Target:	Desmin (DES)
Protein Characteristics:	AA 1-470
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Desmin protein is labelled with His tag.

Purpose:	Custom-made recombinant DES Protein expressed in mammalian cells.
Sequence:	MSQAYSSSQR VSSYRRTFGG APGFPLGSPL SSPVFPRAGF GSKGSSSSVT SRVYQVSRTS
	GGAGGLGSLR ASRLGTTRTP SSYGAGELLD FSLADAVNQE FLTTRTNEKV ELQELNDRFA
	NYIEKVRFLE QQNAALAAEV NRLKGREPTR VAELYEEELR ELRRQVEVLT NQRARVDVER
	DNLLDDLQRL KAKLQEEIQL KEEAENNLAA FRADVDAATL ARIDLERRIE SLNEEIAFLK
	KVHEEEIREL QAQLQEQQVQ VEMDMSKPDL TAALRDIRAQ YETIAAKNIS EAEEWYKSKV
	SDLTQAANKN NDALRQAKQE MMEYRHQIQS YTCEIDALKG TNDSLMRQMR ELEDRFASEA
	SGYQDNIARL EEEIRHLKDE MARHLREYQD LLNVKMALDV EIATYRKLLE GEESRINLPI
	QTYSALNFRE TSPEQRGSEV HTKKTVMIKT IETRDGEVVS EATQQQHEVL Sequence without
	tag. The proposed Purification-Tag is based on experiences with the expression system, a
	different complexity of the protein could make another tag necessary. In case you have a
	special request, please contact us.

isoform, please contact us regarding an individual offer. Characteristics: Key Benefits: Made to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalian cells and purified in one-step affinity chromatography · The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC) Purity: Grade: custom-made **Target Details** Desmin (DES) Target: Alternative Name: **DES (DES Products)** Background: Desmin, FUNCTION: Muscle-specific type III intermediate filament essential for proper muscular structure and function. Plays a crucial role in maintaining the structure of sarcomeres, interconnecting the Z-disks and forming the myofibrils, linking them not only to the sarcolemmal cytoskeleton, but also to the nucleus and mitochondria, thus providing strength for the muscle fiber during activity (PubMed:25358400). In adult striated muscle they form a fibrous network connecting myofibrils to each other and to the plasma membrane from the periphery of the Zline structures (PubMed:24200904, PubMed:25394388, PubMed:26724190). May act as a sarcomeric microtubule-anchoring protein: specifically associates with detyrosinated tubulinalpha chains, leading to buckled microtubules and mechanical resistance to contraction.

Required for nuclear membrane integrity, via anchoring at the cell tip and nuclear envelope,

Contributes to the transcriptional regulation of the NKX2-5 gene in cardiac progenitor cells

resulting in maintenance of microtubule-derived intracellular mechanical forces (By similarity).

Target Details

during a short period of cardiomyogenesis and in cardiac side population stem cells in the adult. Plays a role in maintaining an optimal conformation of nebulette (NEB) on heart muscle sarcomeres to bind and recruit cardiac alpha-actin (By similarity).

{ECO:0000250|UniProtKB:P31001, ECO:0000269|PubMed:24200904, ECO:0000269|PubMed:25394388, ECO:0000269|PubMed:26724190,

Molecular Weight:

53.5 kDa

ECO:0000303|PubMed:25358400}.

UniProt:

P17661

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months