OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC205685

Desmin (DES) (NM_001927) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Desmin (DES) (NM_001927) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Desmin
Synonyms:	CDCD3; CSM1; CSM2; LGMD1D; LGMD1E; LGMD2R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC205685 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCCAGGCCTACTCGTCCAGCCAGCGCGTGTCCTCCTACCGCCGCACCTTCGGCGGGGCCCCGGGCT
TCCCGCTCGGCTCCCCGCTGAGCTCGCCCGTGTTCCCGCGGGCGGGTTTCGGCTCTAAGGGCTCCTCCAG
CTCGGTGACGTCCCGCGTGTACCAGGTGTCGCGCACGTCGGGCGGGGCCGGGGGCCTGGGGTCGCTGCGG
GCCAGCCGGCTGGGGACCACCCGCACGCCCTCCTCCTACGGCGCAGGCGAGCTGCTGGACTTCTCACTGG
CCGACGCGGTGAACCAGGAGTTTCTGACCACGCGCACCAACGAGAAGGTGGAGCTGCAGGAGCTCAATGA
CCGCTTCGCCAACTACATCGAGAAGGTGCGCTTCCTGGAGCAGCAGAACGCGGCGCTCGCCGCCGAAGTG
AACCGGCTCAAGGGCCGCGAGCCGACGCGAGTGGCCGAGCTCTACGAGGAGGAGCTGCGGGAGCTGCGGC
GCCAGGTGGAGGTGCTCACTAACCAGCGCGCGCGCGTCGACGTCGAGCGCGACAACCTGCTCGACGACCT
GCAGCGGCTCAAGGCCAAGCTGCAGGAGGAGATTCAGTTGAAGGAAGAAGCAGAGAACAATTTGGCTGCC
TTCCGAGCGGACGTGGATGCAGCTACTCTAGCTCGCATTGACCTGGAGCGCAGAATTGAATCTCTCAACG
AGGAGATCGCGTTCCTTAAGAAAGTGCATGAAGAGGAGATCCGTGAGTTGCAGGCTCAGCTTCAGGAACA
GCAGGTCCAGGTGGAGATGGACATGTCTAAGCCAGACCTCACTGCCGCCCTCAGGGATATCCGGGCTCAG
TATGAGACCATCGCGGCTAAGAACATTTCTGAAGCTGAGGAGTGGTACAAGTCGAAGGTGTCAGACCTGA
CCCAGGCAGCCAACAAGAACAACGACGCCCTGCGCCAGGCCAAGCAGGAGATGATGGAATACCGACACCA
GATCCAGTCCTACACCTGCGAGATTGACGCCCTCAAGGGCACTAACGATTCCCTGATGAGGCAGATGCGG
GAATTGGAGGACCGATTTGCCAGTGAGGCCAGTGGCTACCAGGACAACATTGCACGCCTGGAGGAGGAAA
TCCGGCACCTCAAGGATGAGATGGCCCGCCATCTGCGCGAGTACCAGGACCTGCTCAACGTGAAGATGGC
CCTGGATGTGGAGATTGCCACCTACCGGAAGCTGCTGGAGGGAGAGGAGAGCCGGATCAATCTCCCCATC
CAGACCTACTCTGCCCTCAATTTCCGAGAAACCAGCCCTGAGCAAAGGGGTTCTGAGGTCCATACCAAGA
AGACGGTGATGATCAAGACCATCGAGACACGGGATGGGGAGGTCGTCAGTGAGGCCACACAGCAGCAGCA
TGAAGTGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205685 protein sequence
Red=Cloning site Green=Tags(s)

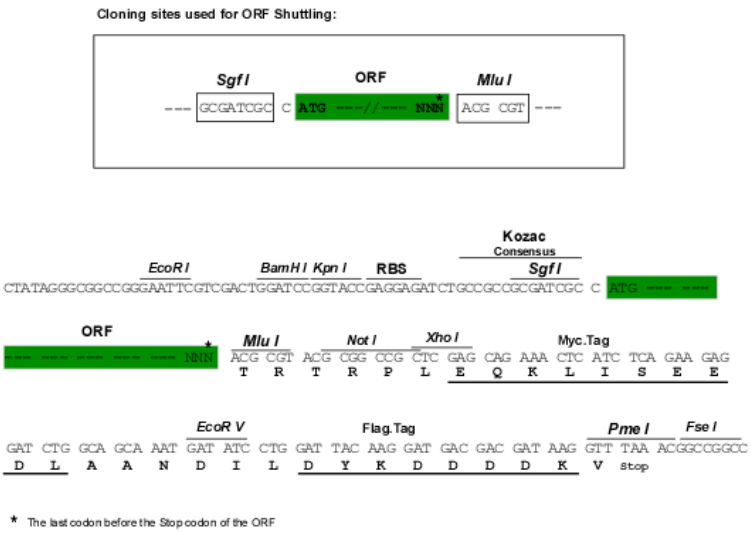
MSQAYSSSQRVSSYRRTFGGAPGFPLGSPLSSPVFPRAGFGSKGSSSSVTSRVYQVSRTSGGAGGLGSLR
ASRLGTTRTPSSYGAGELLDFSLADAVNQEFLTTRTNEKVELQELNDRFANYIEKVRFLEQQNAALAAEV
NRLKGREPTRVAELYEEELRELRRQVEVLTNQRARVDVERDNLLDDLQRLKAKLQEEIQLKEEAENNLAA
FRADVDAATLARIDLERRIESLNEEIAFLKKVHEEEIRELQAQLQEQQVQVEMDMSKPDLTAALRDIRAQ
YETIAAKNISEAEEWYKSKVSDLTQAANKNNDALRQAKQEMMEYRHQIQSYTCEIDALKGTNDSLMRQMR
ELEDRFASEASGYQDNIARLEEEIRHLKDEMARHLREYQDLLNVKMALDVEIATYRKLLEGEESRINLPI
QTYSALNFRETSPEQRGSEVHTKKTVMIKTIETRDGEVVSEATQQQHEVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6065_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001927

ORF Size: 1410 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM_001927.4

RefSeq Size: 2268 bp

RefSeq ORF: 1413 bp

Locus ID: 1674

UniProt ID: P17661

Cytogenetics: 2q35

Domains: filament, filament_head

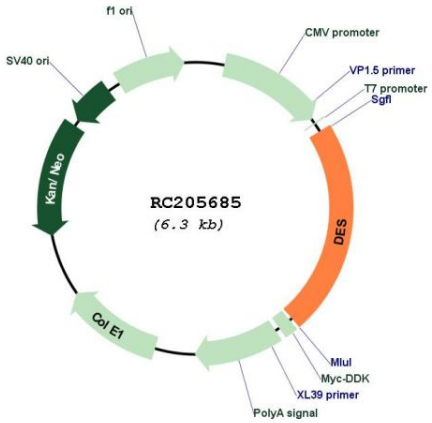
Protein Families: Druggable Genome

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

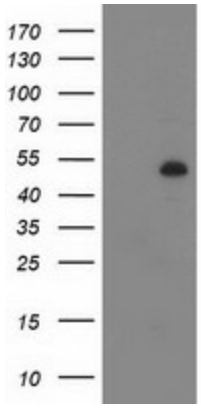
MW: 53.5 kDa

Gene Summary: This gene encodes 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. [provided by RefSeq, Jul 2008]

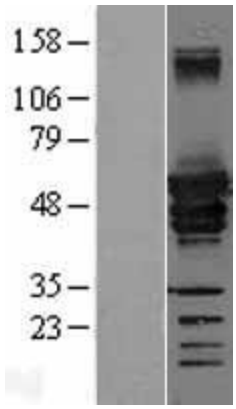
Product images:



Circular map for RC205685



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DES (Cat# RC205685, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DES(Cat# [TA502328]). Positive lysates [LY400713] (100ug) and [LC400713] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400713]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205685 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).