

Product datasheet for **RC209218**

Desmocollin 2 (DSC2) (NM_024422) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Desmocollin 2 (DSC2) (NM_024422) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Desmocollin 2
Synonyms:	ARVD11; CDHF2; DG2; DGII/III; DSC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC209218 representing NM_024422
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGCAGCCCGCCCTCCGGCTCCTGGAACGGAGCCCTCTGCCGGCTGCTCCTGCTGACCCCTCGCGA
 TCTTAATATTTGCCAGTGATGCCTGCAAAAATGTGACATTACATGTTCCCTCCAAACTAGATGCCGAGAA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209218 representing NM_024422
 Red=Cloning site Green=Tags(s)

MEARPSSGWSNGALCRLLLTLAILIFASDACKNVTLHVPSKLDAEKLVGRVNLKECF TAANLIHSSDPD
 FQILEDGSVYTTNTILL SSEKRSFTILL SNTENQEKKKIFVLEHQTKVLKRRHTKEKVLRAKRRWAPI
 PCSMLNSLGPFFLFLQQVQSDTAQNYTIYYSIRGPGVDQEPNLFYVERDTGNLYCTRPVDREQYESFE
 IIAFATTPDGYTPPELPLPLIIKIEDENDNYPIFTEETYFTIFENCRVGTTVGVQCATDKDEPDTMHTRL
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 GTLGII LQDVNDNSPFI PKKTVIICKPTMSSAEIVAVDPDEPIHGPPDF SLESSTSEVQRMWRLKAIN D
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 LLGIALLF CILFTLVCGASGTSKQPKVIPDDL AQQNLIVSNTEAPGDDKVYSANGFTTQTVGAS AQGVCG
 TVGSGIKNGGQETIEMVKGGHQTSESCRAGHHHTLDSCRGGHTEVDNCRYT YSEWHSFTQPR LGEKVYL
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Restriction Sites:

SgfI-MluI

Cloning Scheme:

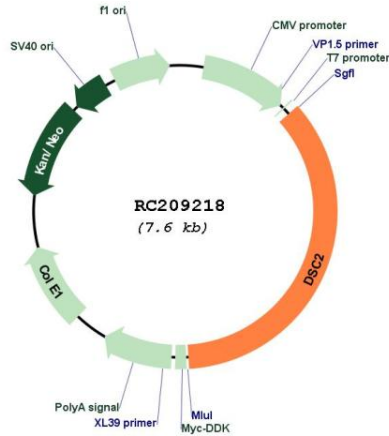


ACCN: NM_024422

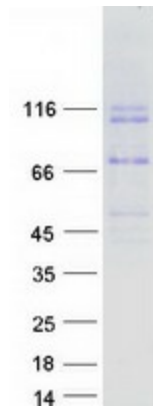
ORF Size:	2703 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_024422.6
RefSeq Size:	5140 bp
RefSeq ORF:	2706 bp
Locus ID:	1824
UniProt ID:	Q02487
Cytogenetics:	18q12.1
Domains:	CA
Protein Families:	Transmembrane
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC)
MW:	97 kDa

Gene Summary:

This gene encodes a member of the desmocollin protein subfamily. Desmocollins, along with desmogleins, are cadherin-like transmembrane glycoproteins that are major components of the desmosome. Desmosomes are cell-cell junctions that help resist shearing forces and are found in high concentrations in cells subject to mechanical stress. This gene is found in a cluster with other desmocollin family members on chromosome 18. Mutations in this gene are associated with arrhythmogenic right ventricular dysplasia-11, and reduced protein expression has been described in several types of cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2015]

Product images:


Circular map for RC209218



Coomassie blue staining of purified DSC2 protein (Cat# [TP309218]). The protein was produced from HEK293T cells transfected with DSC2 cDNA clone (Cat# RC209218) using MegaTran 2.0 (Cat# [TT210002]).