

Product datasheet for **RG209218**

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:	TurboGFP
Symbol:	Desmocollin 2
Synonyms:	ARVD11; CDHF2; DG2; DGII/III; DSC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG209218 representing NM_024422
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGCAGCCCGCCCTCCGGCTCCTGGAACGGAGCCCTCTGCCGGCTGCTCCTGCTGACCCCTCGCGA
 TCTTAATATTTGCCAGTGATGCCTGCAAAAATGTGACATTACATGTTCCCTCCAAACTAGATGCCGAGAA
 ACTTGTGGTAGAGTTAACCTGAAAGAGTGCTTTACAGCTGCAAACTAATTCATTCAAGTGATCCTGAC
 TTCCAAATTTTGGAGGATGGTTCACTATAACAACAATACTATTCTATTGCTCCTCGGAGAAGAGAAGTT
 TTACCATATTACTTTCCAACACTGAGAACAAGAAAAGAAGAAAATTTTGTCTTTTGGAGCATCAAAC
 AAAGGTCTAAAGAAAAGACATACTAAAGAAAAGTTCTAAGGCGCGCCAAGAGAAGATGGGCTCCAATT
 CCTTGTTCGATGCTAGAAAACCTTGGGTCCTTTTCCACTTTTCTTCAACAGGTTCAACTGACACGG
 CCCAAAATAACCATATACTATTCCATAAGAGGTCCTGGAGTTGACCAAGAACCCTGGAAATTTATTTTA
 TGTGGAGAGAGACTGGAACTTGTATTGTACTCGTCTGTAGATCGTGAGCAGTATGAATCTTTTGGAG
 ATAATTGCCTTTGCAACAACCTCCAGATGGGTATACTCCAGAACTCCACTGCCCTAATAATCAAATAG
 AGGATGAAAATGATAACTACCAATTTTACAGAAGAACTTATACTTTTACAATTTTGAATTTGCGAG
 AGTGGGCACTACTGTGGGACAAGTGTGTCTACTGACAAAAGATGAGCCTGACACGATGCACACACGCCTG
 AAGTACTCCATCATTGGGAGGTGCCACCATCACCCACCCTATTTTCTATGCATCCAACACAGGCGTGA
 TCACCACAACATCATCTCAGCTAGACAGAGAGTTAATTGACAAGTACCAGTTGAAAATAAAAGTACAAGA
 CATGGATGGTCAGTATTTTGGTCTACAGACAACCTCAACTGTATCATTAAACATTGATGATGTAATGAC
 CACTTGCCAACATTTACTCGTACTTCTTATGTGACATCAGTGAAGAAAATACAGTTGATGTGAAAATCT
 TACGAGTTACTGTTGAGGATAAGGACTTGTGAATACTGCTAACTGGAGAGCTAATTAACCAATTTTAAA
 GGGCAATGAAAATGGCAATTTTAAAATTGTAACAGATGCCAAAACCAATGAAGGAGTTCTTTGTGTAGTT
 AAGCCTTTGAATATGAAGAAAAGCAACAGATGATCTTGCAAATGGTGTAGTTAATGAAGCTCCATTTT
 CCAGAGAGGCTAGTCCAAGATCAGCCATGAGCACAGCAACAGTTACTGTTAATGTAGAAGATCAGGATGA
 GGGCCCTGAGTGAACCCCTCAAATACAGACTGTTGCGATGAAAGAAAATGCAGAAGTGGGAAACAACAGC
 AATGGATATAAGCATATGACCCAGAAAACAAGAAGTAGCAGTGGCATAAGGTATAAGAAATTAAGTATC
 CAACAGGGTGGGTCACCATTGATGAAAATACAGGATCAATCAAAGTTTTCAGAAGCCTGGATAGAGAGGC
 AGAGACCATCAAAAATGGCATATAAATATTACAGTCTTGCATCAGACCAAGGAGGAGAACATGTACG
 GGGACTGGGCATTATACTTCAAGACGTGAATGATAACAGCCCATTCATACCTAAAAAGACAGTATCA
 TCTGCAAACCCACCATGTCATCTGCGGAGATTGTTGCGGTTGATCCTGATGAGCCTATCCATGGCCACC
 CTTTGACTTTAGTCTGGAGAGTTCTACTTCAGAAGTACAGAGAATGTGGAGACTGAAAGCAATTAATGAT
 ACAGCAGCACGTCTTTCCTATCAGAATGATCCTCCATTTGGCTCATATGTAGTACCTATAACAGTGAAG
 ATAGACTTGGCATGTCTAGTGTCACTTCATTGGATGTTACTGTGTGACTGCATTACCGAAAATGACTG
 CACACATCGTGTAGATCCAAGGATTGGCGGTGGAGGAGTACAACCTGGAAAAGTGGCCATCCTTGAATA
 TTGTTGGGCATAGCATTGCTCTTTTGCATCCTGTTTACGCTGGTCTGTGGGGCTTCTGGGACGTCTAAAC
 ACCAAAAGTAACTCTGATGATTTAGCCAGCAGAACCTAATTGATCAAACACAGAAGCTCCTGGAGA
 TGACAAAAGTATTCTGCGAATGGCTTCAACACCAAACTGTGGGCGCTTCTGCTCAGGGAGTTTGTGGC
 ACCGTGGGATCAGGAATCAAAAACGGAGGTCAGGAGACCATCGAAATGGTGAAGGAGGACACAGACCT
 CGGAATCCTGCCGGGGGCTGGCCACCATCACACCCTGGACTCCTGCAGGGGAGGACACAGGAGGTGGA
 CAACTGCAGATACACTTACTCGGAGTGGCAGATTTTACTCAGCCCGTCTTGGTAAAAAGTGTATCTG
 TGTAAATCAAGATGAAAATCACAAGCATGCCAAGACTATGTCCTGACATATAACTATGAAGGAAGAGGAT
 CGGTGGCTGGTCTGTAGGTTGTTGCAGTGAACGACAAGAAGAAGATGGGCTTGAATTTTGGATAATTT
 GGAGCCCAATTTAGGACTAGCAGAAGCATGCATGAAGAGA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

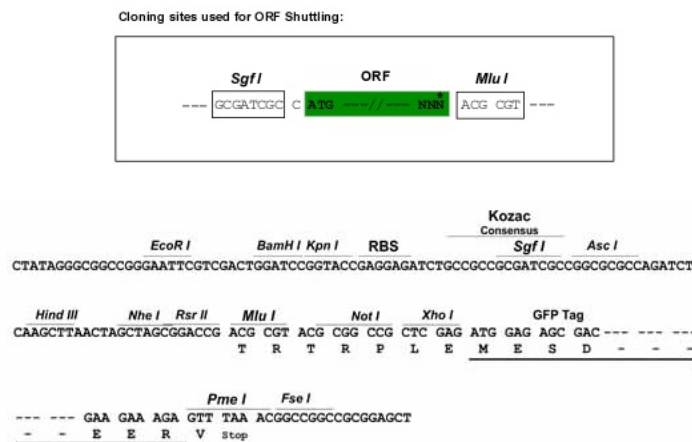
Protein Sequence: >RG209218 representing NM_024422
 Red=Cloning site Green=Tags(s)

MEARPSGSWNGALCRLLLTLAILIFASDACKNVTLHVPSKLDAEKLVGRVNLKECF¹TAANLIHSSDPD
 FQILEDGSVYTTNTILLSSEKRSFTILLSENTENQEKKKIFVFLHQTKVLKRRHTKEKVLRRAKRRWAPI
 PCSMLENSLGPFFLFLQQVQSDTAQNYTIYYSIRGPGVDQEPNLFYVERDTGNLYCTRPVDREQYESFE
 IIAFATTPDGYTPELPLPLIIKIEDENDNYPIFTEETYFTIFENCVRVGTTVGQVCATDKDEPDTMHTRL
 KYSIIGQVPPSPTLFSMHPTTGVIITTSQDLRELIDKYQLKIKVQMDGQYFGLQTTSTCIINIDDVND
 HLPFTFRTSYVTSVEENTVDVEILRVTVEDKDLVNTANWRANYTILKGNENGNFKIVTDAKTNEGVLCV
 KPLNYEEKQQMILQIGVVNEAPFSREASPRSAMSTATVTVNVEDQDEGPECNPIQTVRMKENAEVGTTS
 NGYKAYDPETRSSSGIRYKLLDPTGWVIDENTGSIKVFRLDREAETIKNGIYNITVLASDQGGRTCT
 GTLGIIILQDVNDNSPFIKKTVIICKPTMSSAEIVAVDPDEPIHGPPDFLESSTSEVQRMWLKAIND
 TAARLSYQNDPPFGSYVVPITVRDLGMSVTSLDVTLDCITENDCTHRVDPRI²GGGGVQLGKWA³ILAI
 LLLGIALFLCILFTLVCGASGTSKQPKVIPDDL⁴AQQNLIVSNTEAPGDDK⁵VYSANGFTTQTVGAS⁶AQGVCG
 TVGSGIKNGGQETIEMVKGGHQTSESCRGAGHHHTLDSCRGGHTEVDNCRYTYSEWHSFTQ⁷PRLGEK⁸VYL
 CNQDENHKHAQDYVLTYNYEGRGSVAGSVGCCSERQEEDGLEFLDNLEPKFRTLA⁹EACMKR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

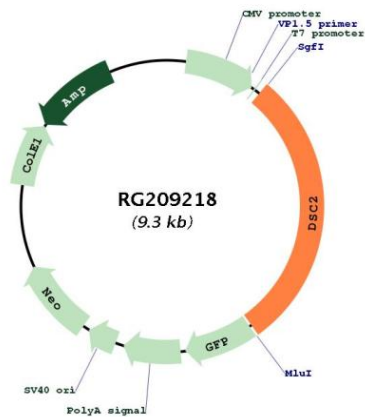
Cloning Scheme:



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)

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 RG209218