

Product datasheet for **SC124977**

Desmocollin 2 (DSC2) (NM_024422) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Desmocollin 2 (DSC2) (NM_024422) Human Untagged Clone
Tag:	Tag Free
Symbol:	Desmocollin 2
Synonyms:	ARVD11; CDHF2; DG2; DGII/III; DSC3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC124977 sequence for NM_024422 edited (data generated by NextGen Sequencing)

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ATGGAGGCAGCCCCTCCGGCTCCTGGAACGGAGCCCTCTGCCGGCTGCTCCTGCTG
ACCCTCGGATCTTAATATTTGCCAGTGATGCCTGCAAAAATGTGACATTACATGTTCCC
TCCAAACTAGATGCCGAGAACTTGTGGTAGAGTTAACCTGAAAGAGTGCTTTACAGCT
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AGATGA

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Clone variation with respect to NM_024422.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_024422 unedited
 GGCAGCAATTTGTAATACGACTCACTATAGGGCGGCCGCGAAATCGGCACCAGGNATGAG
 AGGCAGGCGCTTCAGAGAAGCTAAGAAAACACCTCTCCGCGCGCCCCACCTCCTCCGCT
 CGCGCTCCTCCTGAGCAGCGGGCCAGACTGCGCTCCGGCCGCGGCCCTCGCCCCGCGGA
 GCCCTCTACCCCGGCCGACGCTCGGCCCGGACCTGCCCGAGCCCTCCTCATGGAGG
 CAGCCCCCCCCTCCGGCTCCTGGAACGGAGCCCTCTGCCGGCTGCTCCTGCTGACCCTCG
 CGATCTTAATATTTGCCAGTGATGCCTGCAAAAATGTGACATTACATGTTCCCTCCAAAC
 TAGATGCCGAGAAACTTGTGGTAGAGTTAACCTGAAAGAGTGCTTTACAGCTGCAAATC
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 GACATACTAAAGAAAAGTTCTAAGGCGCGCAAGAGAAGATGGGCTCCAATTCCTGT
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 CGGCCAAAACCTATACCATATACTATTCCATAAGAGGCTCTGGAGTTGACCAAGAACCTC
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 TGAGCAGTATGAAATCTTTGAGATATNGCCCTTGCAAACTCAGATGGTATCTNCAGAAC
 TTCATGNCCNNTATATCAATAGAGATGAAATGATACTACCCATTTTACAGAGAACTAAC
 TT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_024422 unedited
 GGGGCTACTCGGGTCCCAGAACCCAAATAGTTTTNCAATAACACCCAGCGCCAAACACCG
 GAATATATCGGAANGACACCAACAGTGGCCCTTAGTGGACAAAAGAATGACTGTCATG
 CTTCAAAAATAATTTTTATTGAAGTGACTTACACTGGAGCCTGATGAAACAAGTTCTGTT
 ATTATCCCCCATTTTAAAATGATGAAAATGGACTTATCAAAAGCAAGCAACTTAACCTTT
 AGGGGGGGGCTCACAGCCTTTAGAATAGTCATATTATATAAATATGGCAATAACAATGC
 ACTGAAAATGTCTCCAAACACACTCTACTCTTTTAAAAAATGTATAACAGGCAATCTAA
 GGAAGGGGTCTACTTCTCTGATTACGGAGTGCTAAATCCCTTAACTCAAATCAGACC
 TGTGATGAGCAAGCTGCAACAAAGTTACAGAACTGCTTAACTTACTTTATCATGGCCTA
 TTATTGTATACGAATTTCTTATTTACTTTACTAAACACAACCTTTGGAAAACCTAATTTAGG
 CTGTCCGGCATAAAAACCTCCGGTAAGATAACCTGCTCACCACACAACCTCGGTAGAGATAA
 CCTGGCCGACAATTGTTGCAACAGCGTCCGGGACCTTAACACCCGCCCGTCCGCCCGCT
 TCAAATAAGTAGGAGCCGCTTAACTCTGCCTTATGTTCACTATAAATAGAAAACCTTT
 TGCACCACCTTCTCGCGAAACATCGCCCGGACCTATCGCGAGCCGCCACGCGAACGTT
 GATTCACGCGCCACCAGTCACAGCGTTGGCCGCGTGCCCCCGCTCTTTCGCTGCAG
 TCTAAGACGAAATCCACAGCCGTACCCCCGCCCGGCCACACCCCATCCCA

Restriction Sites:

NotI-NotI

ACCN:

NM_024422

Insert Size:

4700 bp

OTI Disclaimer: 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.

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](#)

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_024422.2](#), [NP_077740.1](#)

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]

Transcript Variant: This variant (Dsc2a, also known as DGII) encodes the longer isoform (Dsc2a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.