

Product datasheet for **SC118960**

Desmocollin 3 (DSC3) (NM_001941) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Desmocollin 3 (DSC3) (NM_001941) Human Untagged Clone
Tag:	Tag Free
Symbol:	DSC3
Synonyms:	CDHF3; DSC; DSC1; DSC2; DSC4; HT-CP
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None



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Fully Sequenced ORF: >NCBI ORF sequence for NM_001941, the custom clone sequence may differ by one or more nucleotides

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ATGGCCGCGCTGGGCCCGCGCTCCGTGCGCGGAGCCGTCTGCCTGCATCTGCTGCTGACCCCTCGTGA
TCTTCAGTCGTGCTGGTGAAGCCTGCAAAAAGGTGATACTTAATGTACCTTCTAAACTAGAGGCAGACAA
AATAATTGGCAGAGTTAATTTGGAAGAGTGCTTCAGGTCTGCAGACCTCATCCGGTCAAGTGATCCTGAT
TTCAGAGTTCTAAATGATGGGTGAGTACACAGCCAGGCTGTTGCGCTGTCTGATAAGAAAAGATCAT
TTACCATATGGCTTTCTGACAAAAGGAAACAGACACAGAAAAGAGTTACTGTGCTGCTAGAACATCAGAA
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CCTTGCTCTATGCAAGAGAATTCCTTGGGCCCTTCCCATTGTTTCTTCAACAAGTTGAATCTGATGCAG
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AGGATGAAAATGACAACCACCCTGTTTTACAGAAAGCAATTTATAATTTTGAAGTTTTGGAAAGTAGTAG
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CATGGATGGCCAGTTTTTTGGATTGATAGGCACATCAACTTGTATCATAACAGTAACAGATTCAAATGAT
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TGAAAATCCCAAAAATGAGTTGTATAATATTACAGTCTGGCAATAGACAAAAGATGATAGATCATGTA
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TGGGCTGCTGAGTAAAAGCAGGAAGAAGATGGCCTTGACTTTTTAAATAATTTGGAACCAAAATTTAT
TACATTAGCAGAAGCATGCACAAAGAGATAA
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5' Read Nucleotide Sequence: >OriGene 5' read for NM_001941 unedited
 CCGCCCCTTGACGCATATGGGCGGTAGCGTGTACGGTGGNGAGTCTATATAAGCAGAGCT
 CGTTTAGTGAACCGTCAGAAATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGG
 CACCAGGTCTCGCTCTCGGCACCTCCCGGCGCCCGCTTCTCTGGCCCTGCCCGCAT
 CCCGATGGCCCGCGTGGGCCCGGCGCTCCGTGCGCGGAGCCGTCTGCCTGCATCTGCT
 GCTGACCCTCGTGATCTTCAGTCGTGCTGGTGAAGCCTGCAAAAAGGTGATACTTAATGT
 ACCTTCTAAACTAGAGGCAGACAAAATAATTGGCAGAGTTAATTTGGAAGAGTGCCTCAG
 GTCTGCAGACCTCATCCGGTCAAGTGATCCTGATTTTCAGAGTTCTAAATGATGGGTCAGT
 GTACACAGCCAGGGCTGTTGCGCTGTCTGATAAGAAAAGATCATTACCATATGGCTTTC
 TGACAAAAGGAAACAGACACAGAAAAGAGTTACTGTGCTGCTAGAACATCAGAAGAGGTA
 TCGAAGACAAGACACACTAGAGAACTGTTCTCANGCGTGCCCAAGAGAGATGGGCACCT
 ATTCTTGCTCTATGNCAGAGAATTCNNTGGGCCCTTTNCCATTTGTTTCTCAACAGTTG
 AATCTGATGCAGCACAGAACTATACTGTCTTCTACTCAATAGTGGACGTGGAGTTGAAAA
 GAACCTTTTAAATGNTTATATAGAAAAGAACCTGGAATCTATTTGCACTCGGCCTGT
 GNATCCGAAGAATTGATGTTNTTGAATTGAATGCCTATGCGCAACTGGCAATGGATATC
 CACCAAATCTGCCCTTCCCTTACCCTTCGGTTAAGAATGAAAAGCAAACCCCGGTTT
 CCAAAAAACAATTTAATTTTGAATTTTGGAAAANAAAAACCTGTCTACAGGGGGGGG
 GTTG

3' Read Nucleotide Sequence: >OriGene 3' read for NM_001941 unedited
 CGTGGACCATTGGCGATGCCACTTCCCAGNCCAGNATAGCACTGGGGAAGGGTGTCAC
 AGGGCATGCCACCGGGTCTGTTCAGGAAACAGCTATGACCGCGCCGCAATCTAGAGT
 CGAGTTTTTTTTTTTTTTTTTAAATGTATCCGGTATTTTACTATTACAACAAAAATCC
 AATGAACATTCCTGAAGACATACAAAAATAATGGTTACAATAGAAGTTACTGGAATTG
 AAATTTTGGTTCAACCTATATTAATGTAAGGCTTTTGTATAGCTAATAGATTTTGA
 AATGATCAGTCTTAACGTTTGTAGGGGAGCACACTCCTGCATGGGAAAAGATTCAGTGT
 GAAGCACAGAGCACCTTTATGGTTGGATCATCTTGTCAATAAAGTTCAGGCATTATCTAT
 CCTGTAAGTGGCAAAAATCAAGACTGCAATATTGCCTGCTTTTCTTTTAACTCATGTTTT
 CCCTTGACTACACTGGTCTCAAAGTAAAACCCCTGTGTCAGTGTACTATTCATGGAATA
 CTCTGCCATTATAACCCCTTCTAATACTTTTAAATACCCGATCAAATTTTATTATACCT
 TATGTATCATACATTCCTCACCGTAAATCTGCGCTTCAATAACGCGATTTCCTCCACC
 TTTACTTTTCTTTTACCTGATCTTCATTTTCTTGCATTCTCTATCTGCCCTATATATC
 CCCTTTTCTTTTACTCCTCCATTTTGTGCCATTTTCTCTCCTCTACTCCCCACACC
 CCCCCCTTCTATTTTCTCCATCTATTCTTCTTCCCTTACCCCTTCACTTATCCCCTATC
 CTATCTTCCCGTATTTTCCCTCTCCTTACCCCGTCCCGTATTTCTTCTTCCCC
 TTTTCCCGTTCCTTATCTCATTTCCTTCCCC

Restriction Sites: NotI-NotI
ACCN: NM_001941
Insert Size: 5700 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_001941.2](#), [NP_001932.1](#)

RefSeq Size: 5879 bp

RefSeq ORF: 2691 bp

Locus ID: 1825

UniProt ID: [Q14574](#)

Cytogenetics: 18q12.1

Domains: Cadherin_C_term, CA

Protein Families: Transmembrane

Gene Summary:

The protein encoded by this gene is a calcium-dependent glycoprotein that is a member of the desmocollin subfamily of the cadherin superfamily. These desmosomal family members, along with the desmogleins, are found primarily in epithelial cells where they constitute the adhesive proteins of the desmosome cell-cell junction and are required for cell adhesion and desmosome formation. The desmosomal family members are arranged in two clusters on chromosome 18, occupying less than 650 kb combined. Mutations in this gene are a cause of hypotrichosis and recurrent skin vesicles disorder. The protein can act as an autoantigen in pemphigus diseases, and it is also considered to be a biomarker for some cancers.

Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Apr 2014]

Transcript Variant: This variant (Dsc3a) represents the shorter transcript but encodes the longer isoform (Dsc3a). 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.