

Product datasheet for **RG214959**

Desmocollin 3 (DSC3) (NM_024423) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Desmocollin 3 (DSC3) (NM_024423) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Desmocollin 3
Synonyms:	CDHF3; DSC; DSC1; DSC2; DSC4; HT-CP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG214959 representing NM_024423
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGCGCTGGGCCCGCGCTCCGTGCGCGGAGCCGTCTGCCTGCATCTGCTGCTGACCCCTCGTGA
 TCTTCAGTCGTGATGGTGAAGCCTGCAAAAAGGTGATACTTAATGTACCTTCTAAACTAGAGGCAGACAA
 AATAATTGGCAGAGTTAATTTGGAAGAGTGCTTCAGGTCTGCAGACCTCATCCGGTCAAGTGATCCCTGAT
 TTCAGAGTTCTAAATGATGGGTCAAGTACACAGCCAGGGCTGTTGCGCTGTCTGATAAGAAAAGATCAT
 TTACCATATGGCTTTCTGACAAAAGGAAACAGACACAGAAAGAGGTTACTGTGCTGCTAGAACATCAGAA
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 GGGCTGGGCATCATCATACCCTGGACTCTGCAGGGGAGGACACCGGAGGTGGACAACCTGCAGATACAC
 TTAGTCCGAGTGGCACAGTTTTACTCAACCCGCTCTCGGTGAAGAATCCATTAGAGGACACACTGGT

ACCGTACCGGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG214959 representing NM_024423
 Red=Cloning site Green=Tags(s)

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  MAAAGPRRSVRGAVCLHLLLTLVIFSRDGEACKKVI LNVP SKLEADKIIIGRVNLEECFRSADLIRSSDPD
  FRVLNDGSVYTARAVALSDKKRSFTIWLSDKRKQTQKEVTV LLEHQKKVSKTRHTRETVLRRAKRRWAPI
  PCSMQENSLGPFPLFLQQVESDAAQNYTVFYISGRGVDKEPLNLFYIERDTGNLFCRTPVDREEDVDFD
  LIAYASTADGYSADLPLPLPIRVEDENDNHPVFT EAIYNFEVLESSRPGTTVGVCATDRDEPDTMHTRL
  KYSILQQTPRSPGLFSVHPSTGVITTVSHYLDREVVDKYS LIMKVQMDGQFFGLIGTSTCIITVTDSDN
  NAPTFRQNAYEAFVEENAFNVEILRIPIEDKDLINTANWRVNF TILKGNENGHFKISTDKETNEGVL SVV
  KPLNYEENRQVNLEIGVNNEAPFARDIPRV T ALNRALVTVHVRDLDEGP ECTPAAQYVRIKENLAVGSKI
  NGYKAYDPENRNGNGLRYKKLHDPKGWITIDEISGSIITSKILDREVETPKNELYNITVLAIDKDDR SCT
  GTLAVNIEDVNDNPPEILQEYVVICPKMGYTDILAVDPDEPVHGAPFYFSLPNTSPEISRLWSLTKVND
  TAARLSYQKNAGFQEYTIPIITVKDRAGQAATKLLRVNLCECTHPTQCRATSRSTGVILGKWA IAILLGI
  ALLFSVLLTLVCGVFGATKGRFPEDLAQQNLII SNTEAPGDDRVC SANGFMTQTNNSSQGF CGT MGSG
  MKNGGQETIEMMKGGNQTL ESCR GAGHHHTLDSCRGGHTEVDNCRYTYSEWHSFTQPRLGEESIRGHTG
  
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

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](#)

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_024423.1](#), [NP_077741.1](#)

RefSeq Size: 5920 bp

RefSeq ORF: 2520 bp

Locus ID: 1825

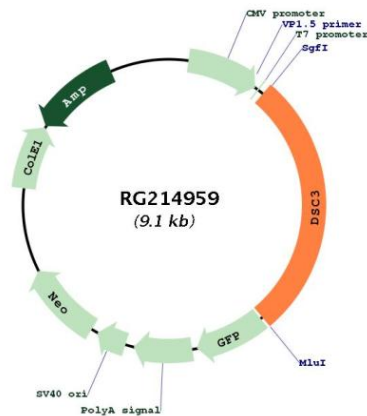
UniProt ID: [Q14574](#)

Cytogenetics: 18q12.1

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]

Product images:

Circular map for RG214959