

Product datasheet for SC315197

Desmoglein 2 (DSG2) (NM_001943) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Desmoglein 2 (DSG2) (NM_001943) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Desmoglein 2 |
| Synonyms: | CDHF5; HDGC |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |

Fully Sequenced ORF: >OriGene ORF sequence for NM_001943 edited
 ATGGCGGGAGCCCGGGACGCGCTACGCCCTGCTGCTTCTCCTGATCTGCTTTAACGTT
 GGAAGTGGACTTCACTTACAGTCTTAAGCACAAAGAAATGAAAAAAGCTGCTTCTCTAAA
 CATCCTCATTTAGTGCAGCAAAAAGCGCCTGGATCACCGCCCCGTGGCTCTTCGGGAG
 GGAGAGGATCTGTCCAAGAAGAATCCAATTGCCAAGATACATTCTGATCTTGCAAGAA
 AGAGGACTCAAAATTAATACTTACAAATACACTGGAAAAGGGATTACAGAGCCACCTTTTGGT
 ATATTTGTCTTTAACAAAGATACTGGAGAAGTGAATGTTACCAGCATTCTTGATCGAGAA
 GAAACACCATTTTTCTGCTAACAGGTTACGCTTTGGATGCAAGAGGAAACAATGTAGAG
 AAACCCTTAGAGCTACGCATTAAGGTTCTTGATATCAATGACAACGAACCAAGTGTTCACA
 CAGGATGTCTTTGTTGGGCTGTGTAAGAGTTGAGTGCAGCACATACTCTTGATGATAA
 ATCAATGCAACAGATGCAGATGAGCCCAATACCCTGAATTCGAAAATTTCTATAGAATC
 GTATCTCTGGAGCCTGCTTATCCTCCAGTGTCTACCTAAATAAAGATACAGGAGAGATT
 TATACAACCAGTGTACCTTGGACAGAGAGGAACACAGCAGCTACACTTTGACAGTAGAA
 GCAAGAGATGGCAATGGAGAAGTTACAGACAAACCTGTAAAAACAAGCTCAAGTTCAGATT
 CGTATTTTGGATGTCAATGACAAATATACCTGTAGTAGAAAAATAAAGTGTGAAGGGATG
 GTTGAAGAAAATCAAGTCAACGTAGAAGTTACGCGCATAAAAAGTGTTCGATGCAGATGAA
 ATAGGTTCTGATAATTGGCTGGCAAATTTACATTTGCATCAGGAAATGAAGGAGGTTAT
 TTCCACATAGAAAACAGATGCTCAAACCTAACGAAGGAATTGTGACCCTTATTAAGGAAGTA
 GATTATGAAGAAAATGAAGAATCTTGACTTCAGTGTATTGTGCGTAATAAAGCAGCTTTT
 CACAAGTCGATTAGGAGTAAATACAAGCCTACACCCATTCCCATCAAGGTCAAAGTGAAA
 AATGTGAAAGAAGGCATTCAATTTAAAAGCAGCGTCATCTCAATTTATGTTAGCGAGAGC
 ATGGATAGATCAAGCAAAGGCCAAATAATTGAAAATTTCAAGCTTTTGTGAGGACACT
 GGACTACCAGCCCATGCAAGATATGAAAATTAGAAGATAGAGATAATTGGATCTCTGTG
 GATTCTGTACATCTGAAATTAACCTTGCAAACTTCTGATTTTGAATCTAGATATGTT
 CAAAATGGCACATACACTGTAAGATTGTGGCCATATCAGAAGATTATCCTAGAAAAACC
 ATCACTGGCACAGTCCTTATCAATGTTGAAGACATCAACGACAACGTCCACACTGATA
 GAGCCTGTGCAGACAATCTGTCAGATGCAGAGTATGTGAATGTTACTGCAGAGGACCTG



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GATGGACACCCAAACAGTGGCCCTTTCAGTTTCTCCGTCATTGACAAACCACCTGGCATG
 GCAGAAAATGGAAAATAGCACGCCAAGAAAGTACCAGTGTGCTGCTGCAACAAAGTGAG
 AAAAAGCTTGGGAGAAGTAAAATTCAGTTCTGATTTTCAGACAATCAGGGTTTTAGTTGT
 CCTGAAAAGCAGGTCTTACACTCACAGTTTGTGAGTGTCTGCATGGCAGCGGCTGCAGG
 GAAGCACAGCATGACTCCTATGTGGCCTGGGACCCGCAGCAATTGCGCTCATGATTTTG
 GCCTTTCTGCTCCTGCTATTGGTACCCTTTTACTGCTGATGTGCCATTGCGAAAAGGGC
 GCCAAAGCTTTACCCCATACCTGGCACCATAGAGATGCTGCATCCTTGGAAATGAA
 GGAGCACCACTGAAGACAAGGTGGTGCCATCATTCTGCCAGTGGATCAAGGGGGCAGT
 CTAGTAGGAAGAAATGGAGTAGGAGGTATGGCCAAGGAAGCCACGATGAAAGGAAGTAGC
 TCTGCTTCCATTGTCAAAGGGCAACATGAGATGTCCGAGATGGATGGAAGGTGGGAAGAA
 CACAGAAGCCTGCTTTCTGGTAGAGCTACCCAGTTTACAGGGGCCACAGGCGCTATCATG
 ACCACTGAAACCACGAAGACCGCAAGGGCCACAGGGGCTTCCAGAGACATGGCCGGAGCT
 CAGGCAGCTGCTGTTGCACTGAACGAAGAATTCTTAAGAAATTTTCACTGATAAAGCG
 GCCTCTTACACTGAGGAAGATGAAAATCACACAGCCAAAGATTGCCTTCTGGTTTATTCT
 CAGGAAGAAACTGAATCGCTGAATGCTTCTATTGGTTGTTGCAGTTTTATTGAAGGAGAG
 CTAGATGACCCGCTTCTTAGATGATTTGGGACTTAAATCAAGACACTAGCTGAAGTTTGC
 CTGGGTCAAAAAATAGATATAAATAAGGAAATTGAGCAGAGACAAAAACCTGCCACAGAA
 ACAAGTATGAACACAGCTTACATTTCACTCTGTGAGCAAATATGGTTAATTCAGAGAAT
 ACCTACTCCTCTGGCAGTAGCTTCCCAGTTCAAAAATCTTTGCAAGAAGCCAATGCAGAG
 AAAGTAACTCAGGAAATAGTCACTGAAAGATCTGTGCTTCTAGGCAGGCGCAAAAGGTA
 GCTACACCTCTTCTGACCCAATGGCTTCTAGAAATGTGATAGCAACAGAAAATCTCTAT
 GTCACAGGGTCCACTATGCCACCAACCCTGTGATCCTGGGTCTAGCCAGCCACAGAGC
 CTTATTGTGACAGAGAGGGTGTATGCTCCAGCTTCTACCTTGGTAGATCAGCCTTATGCT
 AATGAAGGTACAGTTGTGGTCACTGAAAGAGTAATACAGCCTCATGGGGTGGATCGAAT
 CCTCTGGAAGGCACTCAGCATCTTCAAGATGTACCTTACGTCATGGTGAGGGAAAGAGAG
 AGCTTCTTGGCCCCAGCTCAGGTGTGCAGCCTACTCTGGCCATGCCTAATATAGCAGTA
 GGACAGAAATGTGACAGTGACAGAAAGATTCTAGCACCTGCTTCCACTCTGCAATCCAGT
 TACCAGATTCCCCTGAAAATCTATGACGGCTAGGAACACCACGGTGTCTGGAGCTGGA
 GTCCCTGGCCCTCTGCCAGATTTGGTTTAGAGGAATCTGGTCATTCTAATTTACCATA
 ACCACATCTTCCACCAGAGTTACCAAGCATAGCACTGTACAGCATTCTTACTCTAA

**5' Read Nucleotide
 Sequence:**

>OriGene 5' read for NM_001943 unedited
 GAGCACTTGATACGACTCCTATAGGGCGGCCGGAATTCGGCACGAGGGAGCGGTGCGG
 CGGCGGGAGGGCGGAGGCGAGGGTGCATGGCGCGGAGCCCGGACGCGGTACGCCCTGC
 TGCTTCTCCTGATCTGCTTTAACGTTGGAAGTGGACTTCACTTACAGGTCTTAAGCACAA
 GAAATGAAAATAAGCTGCTTCTAAACATCCTCATTTAGTGCGGCAAAAGCGCGCTGGA
 TCACCGCCCCGTGGCTTTCGGGAGGGAGAGGATCTGTCCAAGAAGAATCCAATTGCCA
 AGATACATTCTGATCTTGCAGAAGAAAGAGGACTCAAAATTACTTACAAAATACACTGGAA
 AAGGGATTACAGAGCCACCTTTTGGTATATTTGTCTTTAACAAAGATACTGGAGAAGTGA
 ATGTTACCAGCATTCTTGATCGAGAAGAAACACCATTTTTTCTGCTAACAGGTTACGCTT
 TGGATGCAAGAGGAAACAATGTAGAGAAACCTTAGAGCTACGCATTAAGTTCTTGATA
 TCAATGACAACGAACCAGTGTTCACACAGGATGTCTTTGTTGGGTCTGTTGAAGAGTTGA
 GTGCAGCACATACTCTTGTGATGAAAATCAATGCAACAGATGCAGATGAGCCCAATACCC
 TGAATTCGAAAATTTCTATAGAATCGTATCTCTGGAGCCTGCTTATCCTCCAGTGTCT
 ACCTAAATAAAGATACAGGAGAGATTTATACAACCAAGTGTACCTTGGACAGAGAGGAAC
 ACAGCAGCTACACTTTGACAGTAGAGCAGAGATGGCATGGAGAAGTTACAGACAAACCTG
 TAAACAGCTCAGTTCAGATTCGATTTTTGGATGTCAATGACATATACCTTGTAGTAGAAA
 ATAAAGTGC

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| 3' Read Nucleotide Sequence: | <p>>Forward primer walk for NM_001943 unedited</p> <pre>AATGGATTAATAAGGAAATCTGAGCAGAGACAAAACTCCTGCCACAGAAACAAGCTATG AACACAGCTTCACATTCCTCTGTGAGCAAATATGGTTAATTCAGAGAATACCTACTCC TCTGGCAGTAGCTTCCCAGTTCCAAAATCTTTGCAAGAAGCCAATGCAGAGAAAGTAACT CAGGAAATAGTCACTGAAAGAAGTGTGTCTTAGGCAGGCGCAAAGGTAGCTACACCT CTTCTGACCCAATGGCTTCTAGAAATGTGATAGCAACAGAAAATTCCTATGTCACAGGG TCCACTATGCCACCAACCACTGTGACCCTGGGTCTAGCCAGCCACAGAGCCTTATTGTG ACAGAGAGGGTGTATGCTCCAGCTTCTACCTTGGTAGATCAGCCTTATGCTAATGAAGGT ACAGTTGTGGTCACTGAAAGAGTAATACAGCCTCATGGGGGTGGATCGAATCCTCTGGAA GGCACTCAGCATCTCAAGATGTACCTTACGTCATGGTGAGGGAAAGAGAGAGCTTCCTT GCCCCAGCTCAGGTGTGCAGCCTACTCTGGCCATGCCTAATATAGCAGTAGGACAGAAT GTGACAGTGACAGAAAGAGTTCTAGCACCTGCTCCACTCTGCAATCCAGTTACCAGATT CCCCTGAAAATCTATGACGGCTAGGAACACCACGGTGTCTGGAGCTGGAGTCCCTGGC CCTCTGCCAGATTTGGTTTAGAGGAATCTGGTCATTCTAATTCTACCATAACCACATCT TCCACCAGAGTCACCAAGCATAGCACTGTACAGCATTCTACTCCTAAACAGCAGTCAGC CACAAACTGACCCAGAGTTTATTAGCAGTGACTAATTTTATGTTCCATGTACCTGATTT TTCATGAGCCTTACAGACCCACAGAGAACCCATACACATTGATTCTT</pre> |
| Restriction Sites: | Please inquire |
| ACCN: | NM_001943 |
| Insert Size: | 5000 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA. |
| 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). |

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| 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_001943.1 , NP_001934.1 |
| RefSeq Size: | 3516 bp |
| RefSeq ORF: | 3354 bp |
| Locus ID: | 1829 |
| UniProt ID: | Q14126 |
| Cytogenetics: | 18q12.1 |
| Domains: | CA |
| Protein Families: | Transmembrane |
| Protein Pathways: | Arrhythmogenic right ventricular cardiomyopathy (ARVC) |
| Gene Summary: | This gene encodes a member of the desmoglein family and cadherin cell adhesion molecule superfamily of proteins. Desmogleins are calcium-binding transmembrane glycoprotein components of desmosomes, cell-cell junctions between epithelial, myocardial, and other cell types. The encoded preproprotein is proteolytically processed to generate the mature glycoprotein. This gene is present in a gene cluster with other desmoglein gene family members on chromosome 18. Mutations in this gene have been associated with arrhythmogenic right ventricular dysplasia, familial, 10. [provided by RefSeq, Jan 2016] |