

Product datasheet for **MG217154**

Dsg2 (NM_007883) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dsg2 (NM_007883) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dsg2
Synonyms:	AA408168; D18Erttd293; D18Erttd293e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG217154 representing NM_007883 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGGAGCCCGGGTGACCGGTGCGCCCTGCTGCTGGTGCAGCTGCTGGCGGTGGTCTGCTTGG
ACTTTGGAACGGACTTCACTTAGAGGTCTTCAGCCCAAGAAATGAAGGCAAACCGTTCCCTAAGCACAC
TCACTTGGTTCGTCAAAAGAGGGCCTGGATCACTGCCCTGTGGCTCTGCGGGAGGGCGAAGACCTGTCC
AGAAAGAACCCGATTGCCAAGATACACTCTGACCTTGCAAGAAAAAGGGATAAAAAATCACGTACAAGT
ACACTGGGAAGGGAATTACAGAACCGCCTTTCGGCATATTCGTCCTTGGATAGAAACACAGGAGAAGTAA
CATCACTAGCATTCTTGACCGGGAAGAAACACCATATTTCTGCTGACAGGCTATGCATTGGACTCCAGA
GGAAACAACCTGGAAAAGCCCTTGGAACTACGCATCAAAGTTCTGGACATCAATGACAACGAGCCAGTGT
TCACACAGGAGGTCTTTGTTGGGTCCATTGAGGAATTGAGTGCAGCACATACACTTGTGATGAAAATCAC
CGCCACAGATGCAGATGACCCGGAGACTCTGAATGCTAAAGTCTCCTACAGAATTGTCTCTCAGGAGCCT
GCAAAATAGTCATATGTTCTACCTAAATAAAGACACGGGGGAGATCTATACGACGATTTTACTTTGGACA
GAGAGGAACACAGCAGCTATTCCTTGACGGTGAAGCAAGAGATGGTAACGGGCAGATAACAGACAAGCC
AGTCCAGCAAGCTCAAGTTCAGATCCGTATATTGGATGCAATGACAATATACCTGTGGTAGAAAAACAAA
ATGATAGAGGGGACAGTGAAGAAAAACCGGTCAATGTAGAAGTCAATGCGGATCAAAGTGACCGATGCAG
ATGAAGTGGGCTCTGATAACTGGCTAGCAAACCTTTACATTTGCATCAGGAAATGAAGGGGGCTATTTCCA
CATTGAGACTGACACACAGACTAATGAAGGATTGTGACCCTTGTCAAGGAAGTGGACTATGAAGAAATG
AAGAAGCTAGACTTGAGCATCATTGTCACTAACAAGCAGCTTTCCACAAGTCCATTCTGAGCAAGTACA
AGGCCACGCCATTCCCATCACTGTCAAGGTCAAGAACGTGGTTGAAGGCATTCAATTTCAAGAGCAGCGT
AGTCTCTTTCCGAGCTAGTGAGGCAATGGATAGATCCAGCCTCAGCAGGTCGATTGGAAATTTTCAAGTT
TTTGATGAAGACTGGTCAAGCAGCTAAAGTAACATATGTAAGTGAAGACTGCAAGACTGACAACCTGGTCT
CTGTGGACTCCGTCACCTCAGAGATTAAGCTTGTAAAGATTCTGACTTTGAATCTAGATATGTCCAAAA
TGGTACCTACACTGCAAAGTTGTGGCCATATCCAAGAACATCCTCAAAAACCATCACTGGCACCATC



GTTATCACTGTTGAAGACGTCAATGACAATTGTCCCGTCTGGTGGACTCTGTACGGAGTGTCTGTGAGG
 ATGAACCATATGTGAATGTCACTGCAGAGGATTTGGATGGGGCCAGAACAGTGCGCCATTCAGCTTCTC
 CATCATTGACCAGCCTCTGGAACGGCAGAGAAGTGGAAAATAACGCACCAGGAAAGTACCAGTGTGCTG
 CTGCAGCAGAGCGAGCGGAAACGCGGGAGAAGTGAATTCCTTCTCATTTCGACAGCCAGGGCTTCA
 GCTGCCCGAAAGGCAGGTCCTTCAGCTCACTGTATGCGAGTGTCTGAAGGGCGGTGGCTGTGTGGCTG
 ACAGTATGACAACACTACGTCGGGTTGGCCCTGCCGCCATCGCTCTCATGATTCTAGCACCCTGCTCCTG
 CTCCCTGGTCCGCTCTTGTGTTGATATGCCACTGTGGAGGGGGCCAAAGGCTTCACCCCATTCCTG
 GGACAATAGAGATGCTGCACCCCTTGAATAATGAAGGGCACCTCCTGAGGACAAGGTGGTCCATCGCT
 TCTGGTGGCCGATCATGCAGAGAGCTCGGCAGTGAGAGCGGCGTAGGAGGTGCGATGCTCAAGGAAGGC
 ATGATGAAAGGCAGCAGCTCAGCTTCCGTTACCAAAGGGCAGCATGAGCTGTCTGAGGTTGACGGAAGT
 GGAAGAACACAGAAGCCTCCTCACCCTGCGGCACTACCATGTAAGGACAGCAGGAACCATCGCTGC
 CAACGAAGCCGTAAAGACAAGAGCCACGGGCTTCCAGAGACATGAGTGGGCTCGAGGAGCCGTTGCC
 GTGAATGAGGAATTCTTAAGAAGTTACTTCACAGAGAAAGCGGCTCCTACAATGGGGAAGACGACCTC
 ACATGGCCAAAGACTGCCTTCTCGTTTACTCTCAGGAAGACACGGCTCCTCCGAGGCTCGGTCCGGTG
 CTGCAGTTTCATCGAGGAGAACTCGATGACCTGTTTCTGGATGATCTTGGCCTTAAATTCAAGACCTA
 GCTGAAGTTTGCCTAGGTGAAAAGATCGATCTGGATGTGGACATTGAACAGAGGCAGAAGCCGGTACAG
 AAGCGAGCGTGAGTGCAGCTTCTGGCTCGCACTATGAGCAAGCGGTAACCAGCTCAGAGAGCGGTA
 CTCTAACACCGGCTTCCCGCCCCAAACCTCTGCACGAAGTGCACACAGAGAAAGTACACAGGAAATC
 GTCAGTGAAGCTCTGTATCTTCCAGGCAGAGTCAAGAGTGTACCGCCACCTGATCCTGTGGCTTCTG
 GTAATATTATAGTGACGGAAACTTCTATGCCAAAGGCTCAGCAGTGCACCCAGCACTGTGCTCCTGGC
 TCCAGACAGCCACAGAGCCTGATCGTGACAGAGAGGGTGTATGCTCCAACTCCACCTTGGTGGATCAG
 CATTATGCCAATGAAGAAAAAGTCTTGTACCGAACGAGTGTACAGCCTAATGGGGCATCCCTAAGC
 CCCTTGAAGTACCCAGCATCTGAAAGATGCACAGTATGTAATGGTGAAGGAAAGAGAGCATCCTTGC
 TCCAGCTCAGGCGTGCAGCCACTCTGGCAATGCCAGCGTGGCAGCAGGAGGACAGAATGTCACCGTG
 ACAGAAAGAATACTAACTCCTGCTTCCACTCTGCAGTCCAGCTACCAGATTCCCAGTGAACCTCCATCA
 CGGCTAGGAACACTGTGCTCTAGTGTGGGAAGCATAGGTCTCTGCCCAATTTAGATCTAGAGGAATC
 TGATCGTCCCAATTCTACTATAACCACATCTTCCACCAGGTCACCAAGCATAGCACCATGCAACATTCT
 TACTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG217154 representing NM_007883
 Red=Cloning site Green=Tags(s)

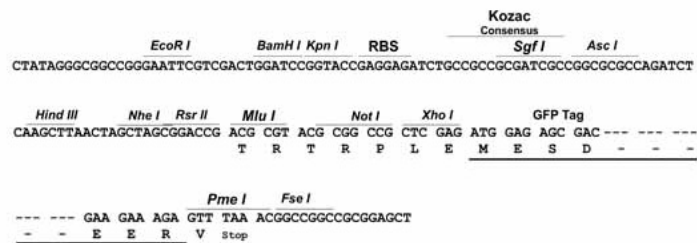
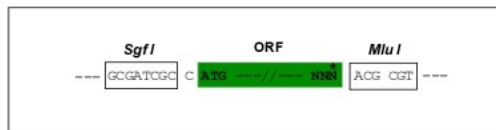
MARSPGDRCALLLLVQLLAVVCLDFGNGLHLEVFSPRNEGKPPFKHTLVRQKRAWITAPVALREGEDLS
 RKNPIAKIHSDLAEEKGIKITYKYTGKITEPPFGIFVFDRTGELNITSILDREETPYFLLTGYALDSR
 GNNLEKPLELRIKVLVDINDNEPVFTQEVFVGSIEELSAHATLVMKITATDADDPETLNAKVSYRIVSQEP
 ANSHMFYLNKDTGEIYTTSTFLDREEHSSYSLTVEARDGNGQITDKPVQQAQVQIRILDVNDNIPVVENK
 MYEGTVEENQVNVEMRIKVTDADEVGSDNWLANFTFASGNEGGYFHIEITDTQTNEGIVTLVKEVDYEEM
 KKLDSLIIIVTNKAFFHSILSKYKATPIPIIVKVNVEGIIHFKSSVVSFRASEAMDRSSLRSISGNFQV
 FDEDTGQAAKVTVYKVDQDNWVSVDSVTSEIKLVKIPDFESRYVQNGTYTAKVVAISKEHPQKTIITGTI
 VITVEDVNDNCPVLVDSVRSVCEDEPYVNVTAEDLDGAQNSAPFSFIIIDQPPTAQKWKITHQESTSVL
 LQQSERKRGRSEIPFLISDSQGFSCPERQVQLTVCECLKGGGCVAQYDNYVGLGPAAIALMILALLLL
 LLVPLLLLICHCGGAKGFTPIPGTIEMLHPWNNEGAPPEDKVVPSLLVADHAESSAVRGGVGGAMLKEG
 MMKGSSASVTKGQHELSEVDGRWEEHRSLLTAGATHHVRTAGTIAANEAVRTRATGSSRDMMSGARGAVA
 VNEEFRLSYFTEKAASYNGEDDLHMAKDCLLVYSQEDTASLRGSGCCSFIEGELDDLFLDDLGLKFKTL
 AEVCLGRKIDLDVDIEQRQKPVREASVSAASGSHYEQAVTSSESAYSSTGFPAPKPLHEVHTEKVTQEI
 VTESSVSRQSQKVVPPDPVASGNIIVTETSAYKGSVAPPSTVLLAPRQPQSLIVTERVYAPTSTLVQD
 HYANEKVLVTERVIQPNGGIPKPLEVTQHLKDAQYVMVRERESILAPSSGVQPTLAMPSSVAAGGQNVTV
 TERILTPASTLQSSYQIPSETSITARNTVLSVSGSIGPLPNLDLEESDRPNSTITTSSTRVTKHSTMQHS
 YS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_007883

ORF Size: 3366 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](#)

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_007883.3](#), [NP_031909.2](#)

RefSeq Size: 5730 bp

RefSeq ORF: 3369 bp

Locus ID: 13511

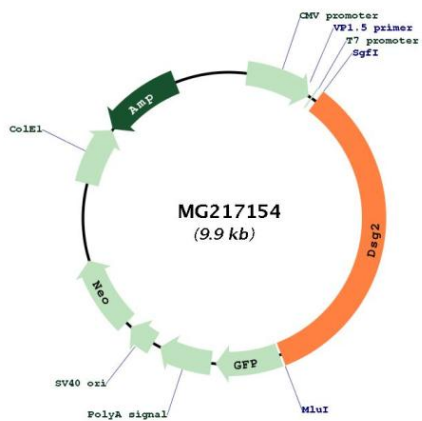
UniProt ID: [O55111](#)

Cytogenetics: 18 11.42 cM

MW: 122.4 kDa

Gene Summary: This gene encodes a member of the cadherin family of proteins that forms an integral transmembrane component of desmosomes, the multiprotein complexes involved in cell adhesion, organization of the cytoskeleton, cell sorting and cell signaling. The encoded preproprotein undergoes proteolytic processing to generate a mature, functional protein. Mice lacking the encoded protein die in utero. Mutant mice lacking a part of the extracellular adhesive domain of the encoded protein develop cardiac fibrosis and dilation. This gene is located in a cluster of desmosomal cadherin genes on chromosome 18. [provided by RefSeq, Jan 2016]

Product images:



Circular map for MG217154