

Product datasheet for **MG220716**

Dsg3 (NM_030596) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dsg3 (NM_030596) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dsg3
Synonyms:	bal
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG220716 representing NM_030596
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACCTGCCTCTCCCTAGAGCCTTGGGGTCTCTGGCCCTCTGATGGTGGTGTCTGCTGGTACAGGGG
 AACTGCATGTGAAGCCGGGAGGACAGCACAGAGAAGATGGGACAGCATTGCAGCTGGCCAAAAGAAGGTA
 CAAACGTGAATGGTGAAATTTGCAAAAACCTGCAGAGAAAAGAGAAGACAACCAAGACGAAACCAATT
 GCCAAGATCACTTCAGATTTCCAAAAAACAGAAAATTACCTACCGCATTCTGGAGTGGGAATTGATC
 AGCCTCCCTTTGGGATCTTTGTTGTTGACCCAAACAATGGTGATATCAACATAACAGCCATAGTTGATCG
 TGAGGAAACCCCAAGCTTCTGATCACATGCCGTGCACTAAATGCCCTGGGACAGGATGTAGAGAGACCA
 CTTATATTAACAGTGAAAATTTAGACGTCAATGATAACCCTCCAATATTTTACAAAACCATATTCAAGG
 GTGAAATTAAGAAAATAGTGCTTCAAATTCCTGGTAATGATCCTAAATGCCACGGATGCAGATGAACC
 AAACCATATGAACTCTAAAATTCCTTCAAATTTCTCCAGGAGCCCGCAGGCATGTCCATGTTCCCTC
 ATCAGCAGAAACACCGGAGAAGTCCGCACCTTTGACCAGTTCTCTTGATCGAGAGCAAATAGTAGCTACC
 ATCTGGTTGTGAGCGGTGCAGACAACGATGGAACAGGACTGTCAACTCAGTGTGAATGTAGTATTAATAA
 TAAAGATGTCAATGACAACCTCCAGTGCTCAGAGAGTCTCAGTATTCAGCACGTATTGAAGAAAATACT
 TTGAATGCAGAGCTACTCCGATTTCAAGTGACAGACTGGGATGAAGAATACACAGATAATTGGTTGGCTG
 TGTATTTCTTACCTCTGGGAATGAGGGGAATTGGTTTGAATTTGAAACAGATCCTAGAACCAATGAAGG
 CATCCTGAAGGTGGTTAAGGCTCTGGATTATGAACAAGTGCAGAGTATGCAGTTTAGTATTGCTGTGAGA
 AACAAAGCTGAGTTCACCAGTCAGTGATCTCTCAGTACCGAGTGCAGTCAACGCCAGTCACAATCAAG
 TCATTGATGTCGAGAGGGAATCTCATTCCGCTCCTCCAAGACATTTACTGTGCAAAGGGTGTAAAG
 CACTAACAAATAGTTGGTTACATCCTGGGACATACCAAGCTACTGATGAGGACACGGGTAAAGCTGCC
 TCCTCTGTGAGATATGCTCTGGGTGTAATGATGGTGGTTTGTCTTATTGATTCAAAGACTGCTCAGA
 TCAAATTTGTCAAAAACATCGACCGAGATTCTACTTTTATAGTTAACAAGACAATTTCTGCTGAGGTTCT
 GGCCATAGACGAAAACACTGGTAAGACCTCCACAGGCACAATATATGTGGAAGTGGCCAGTTTTAATGAA
 AACTGCCCGTCAGTTGCTCTCGAGAAGAAAGACATCTGTACTTCTCACCTTCTGTGACCCTCTCAGTGA
 GAACCTGGACAGGGTAAATACACTGGCCCTACACAGTGTCCCTGGAGGAGCAGCCACTGAAGCTGCC
 AGTCATGTGACCATCACGACGCTGAATGCTACATCAGCTTCTACAAGCCAGCAGCAAGTGTCTCCA
 GGAGTGTACAATGTCCCAGTCATCGTGAAGGACAATCAGGATGGGCTGTGTGACACACCAGAGAGCTTGA
 CCCTGACAGTGTCAATGTGATGACCCGAGCATGTGCAGAGCCCTATCCCGAGCAGAGAGCCTAACAC
 ATATGGGGAGTCATCCTGGAGGCTGGGGCTGCTGCCATTGGCTTGATCCTGCTAGGACTCCTGATGTTG
 CTATTGGCCCCACTTCTGCTTCTGACCTGTGACTGTGGGTGAGTCCCATTGGAGGAGCAGCGACAGGTG
 GCTTTATCCCAGTGCCCGATGGTTCGGAAGGTACAATTCATCAGTGGGGAATCGAAGGAGCTCAGCCCGA
 AGACAAGGAAATCACAAATATTTGTGTTCTCCAGTTACAACCAATGGAGCCGATTTTATGGAAAGCTCT
 GAAGTTTGCACAAATACATATGCTGGTGGGACCATGGTAGAAGGTGCTTCAGGAATGGAATGATTACCA
 AGCTGGGAGGAGCTACTGGAGCTACAGCGGCACCTGGTCCCTGTCTTGGGTTATTGAGGAACAATGAG
 AACAAAGCATTCCACTGGAGGGACCTTGAAGACTATGCTGCGCCAGTCAACATGACTTTCTAGGCTCC
 TATTTCTCTCAGAAATCACTCGCCTATGCCGAGGAAGAGGATGAGCGCGAAGTGAACGACTGTTTGTCTGA
 TCTACGATGATGAAGGCGAGGATGCTGCCCCCACTCCCCACCCTCAGCTCCTGCAGCATTTTTGCCGA
 TGACCTAGACGACAACCTTCTGGATTCCCTTGGCCCCAAATTTAAAAAGCTTGCAGAGATCTGTCTCGGT
 ATTGATGACGAAGCCAAGCAAGCAAGCCAGGCCCTAAAGACAGTGGTTCTGGGGCTGATACCTGCGCTC
 GCTCTATGGAAGTCCCTCAGTCAGTCTAACAGGTACCAGACTTTCCTGGCAGTCTGGAAGTCAACCA
 AACGGTCTCAAATATGCCACACGCTGTGAGCAACCAAGAACTTCTGTTATGTCACCTTCTGGGTCT
 GTCCACCCTGCTGTTGCCATCCCTGACCCTCTACAGCTTGGGAACACTTGTCTACAGAACTTACTCAA
 CTTGAGTTCTTTGACAACCCACCCTGTTACCTTTGACCCCATGTACACAAAATGCTACTGTAAC
 AGAAAGGGTCATTTGTCCCTTCTAGTGCCTCCAGCAGTATAGTGGCTCCACAGAAGTCCGAGGCTCA
 TACAATATGCTCTATACAAAAGAAACCTGTTCCCATCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG220716 representing NM_030596
 Red=Cloning site Green=Tags(s)

MTCLFPRALGSLALLMVVLLVQGELHVKPGGQHREDGTALQLAKRRYKREWVKFAKPCREREDNSRRNPI
 AKITSDFQKNQKITYRISGVGIDQPPFGIFVVDPNNGDINITAIVDREETPSFLITCRALNALGQDVERP
 LILTVKILDVNDNPPIFSQTIFKGEIEENSASNSLVMILNATDADEPNHMNSKIAFKIVSQEPAGMSMFL
 ISRNTGEVRTLTSSLDREQISSYHLVMSGADNDGTGLSTQCECSIKIKDVNDNFPVLRRESQYSARIEENT
 LNAELLRFQVTDWDEEYTDNWLAVYFFTSNGEGNWFIEITDPRTNEGILKVVKALDYEQVQSMQFSIAVR
 NKAEFHQSVISQYRVQSTPVTIQVIDVREGISFRPPSKTFTVQRGVSTNKLVGYLIGTYQATDEDTGKAA
 SSVRYVLGRNDGGLLVIDSKTAQIKFVKNIDRDSTFIVNKTISAEVLAIDENTGKTSTGTIYVEVPFNE
 NCPSSVLEKKDICTSSPSVTLVTRTLDRGKYTGPTYVLSLEEQLKLPVMWTITTLNATSALLQAQQVSP
 GYVNPVIVKDNQDGLCDTPESLTLTVQCDDRSMCRAPIPSREPNTYGESSWRLGPAAIGLILLGLLML
 LLAPLLLLTCDGSGPIGGAATGGFIPVPDGGSTIHWGIEGAQPEDKEITNICVPPVTTNGADFMESS
 EVCTNTYAGGTMVEGASMEMITKLGATGATAALGPCSLGYSGMTMRTRHSTGGTLKDYAAPVNMFTLGS
 YFSQKSLAYAEEDEREVNDCLLIYDDEGEDAAPHSPTLSLSSCSIFADDLDDNFLDSLGPKFKKLAEICLG
 IDDEAKQAKPGPKDSGSGADTCARSMEVPQSGSNRYQTLPGSLEVTQTGSKICHTLSGNQETSVMSTSGS
 VHPVAIIPDPLQLGNYLLTETYSTSGSFAQPTTVTFDPHVTQNVTVTERVICPLPSASSSIVAPTELGRS
 YNMLYTKETCSHL

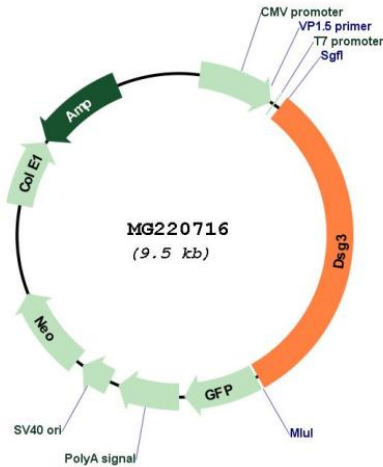
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_030596

ORF Size: 2979 bp

OTI Disclaimer: 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_030596.4](#), [NP_085099.2](#)

RefSeq Size: 4108 bp

RefSeq ORF: 2982 bp

Locus ID: 13512

UniProt ID: [O35902](#)

Cytogenetics: 18 11.39 cM

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 exhibit loss of keratinocyte cell adhesion resulting in a phenotype that resembles that of patients with pemphigus vulgaris. This gene is located in a cluster of desmosomal cadherin genes on chromosome 18. [provided by RefSeq, Feb 2016]