

## Product datasheet for **MG220643**

### Dsg4 (NM\_181564) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dsg4 (NM_181564) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dsg4
Synonyms:	CDHF13; I; lah
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG220643 representing NM_181564 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACTGGCTTCTCTTCAGAAATATTTGCCTTCTGATCTTATTTATGGTGGTACTGGGAGTAAACAGTG  
AATTTATCGTTGAGGTAAAAGAATTAGACATTGAAAATGGCACAACAACCTGGCAGACTGTCAGAAGACA  
AAAGCGGGAGTGGATCAAGTTTGCAGCAGCTGTGGGAGGGCGAGGACAACCTCAAGAGGAATCCAATT  
GCCAGAATTAGATCAGACTGTGAAGTAAGCCAGAGGATAACCTATCGAATCTCTGGAGCGGGGATTGATC  
GGCCACCTTACGGAGTGTCACCATCAACCCTCGGACTGGAGAAATCAATATTACCTCAGTGGTGGACAG  
AGAGATAACCCCACTGTTCTGATCCATTGCCGAGCTCTCAACTCCCAGGAGAAGACTGGAGAGACCA  
CTGGAGCTCAGAGTAAAAGTCATGGATGTGAACGACAACCCCACTCTCACTCAGAATGTGTACACAG  
CCAACATTGAAGAGAACAGCGACGCCAATGCACTGGTGGTAAAGTTAAGTGCCACAGATGCAGATGAAGA  
CAATCACTTGAATTCTAAAATTGCATACAAGATCATCTCCAGGAGCCTGCTGGTGCACCCATGTTTCATG  
GTGAACAGGTACTGGAGAAGTCCGCACGATGCCAATTTCTTGACAGAGAGCAACACAGTATGTACA  
ATCTACTGGTGAAGGGCTCAGATCGGGATGGAGCCACAGATGGGCTGTCTCTGAATGTGACTGCAGAAT  
CAAGATTTTGGATGTCAATGATAATTTCCCATCTTGGAGAAGACCTCATACTCAGCAAGTATTGAAGAA  
AATTTGTTGAGCTCAGAAGTATGACTACAAGCAATCGATCTGGATGAAGAAGGCACTGATAACTGGT  
TGGACAATACTCCATCCTCTCTGGCAATGATGGAACTGGTTTGAATCCAACAGATCCAAAAACCAA  
TGAAGGCATTTTGAAGTGGTCAAGATGCTGGATTATGAACAAGAACCTAACATTTACCTCAGCATTGGA  
GTTAGAAACCAAGCTGAGTTTACCAGTCACTAGCATCTCAATTCAAAATGCACTCTACCCTGTGAGAA  
TCCAGGTTGTTAACGTGCGGGAAGGACCGACCTTTAGCCCAAGTTCCATGACATTTAGTCTACGAGGAGG  
AATGAGAGGAGCCTCCTTAATGAACTATGTGCTTGGCACATACACAGCCATAGATATGGACACAGGAAAC  
CCTGCAACCAATGTCAGGTATGTCATAGGGCATGATGCAGGCAGCTGGTAAAAGTTGATTCAAGGACTG  
GTGAGATACAGTTTTCTAGGGAATTTGACATGAAGTCAAATATATTACGGATGGATATATGCAGCACA  
GATCCTGGCTATAGATGATGGCTCTGGGAGAACAGCTACAGGAACCATATGCATTGAGATTCTGATGCC



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AACGATTACTGTCCCGTCATTTATGCTGAAAGCAGGAGTGTCTGCACCCATGCTTCGTCTGCAGGATCT  
 ATGTCAACGATCATTCTTTCCGGTCTCCCTTTACCTTTTGTGTAGTTGATGAGTCACCAGACATAGCTAA  
 TATATGGGATATCAGGTCATCAATGGAACCTCTGCAATCCTTATGACTGAGCAGACTTTGTCTCCAGGA  
 CCCTACCAAAATCCCCATCCTCGTGAAGGACAGTCACAACCGAGCATGTGAATTGCCACAGACAGTGTCTGT  
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 CGAAGGAGTGATGCAGCCCTGGAGAATAGAGGGGGCTCATCCAGAAGACAGGGATGTATCAAATATTTGT  
 GTACCCATGACAGCCTCTAATACCAAGATCGCATTGATTTCATCTGAAATCTACACCAATACTTACGCTG  
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 GGTGGCTGCAGGAGCAACAGGGACCCTAAGGAAGAGGAGTTCAACTATAGGGACTCTTCGGGAATACCAA  
 GACTGGCATGAACATGGCCTTCTGGACAGCTACTTCTCCGAGAAAGCGTATGCATATGCAGATGAAG  
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 CATTGGCTGCTGCAGTTGGATTGTGGATGACTTAGACGAAAGCTACATAGAGACTTTGGATCCAAAGTTC  
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 TCAGCACTGACCTCCCTCTGCTGGGGCCTAATTACTTTGTCAATGAGTCTTCAGGAATGACTCTCTCAGA  
 GGCTGAATCCAAGCAGAAATGGCAGCAGCCTCTGAACCCATGATTTCATGGGGACATCATAGTACTGAG  
 ACCTACACTACTTCTGACCCATGTGTCCAACCCACAACGATTGTCTTTGACTCTCAGATTCACCAAACG  
 TAGTCGTGACCGAAACCGTAATGGCACCTGTCTACGATGTTCAAGGGAACATTTGTGTGCCTGCTGAGAT  
 AGCCAACACACAATGTATACTATGCTGAGAGAGTGGTGGCTAGCCCTGGTATACCTGCATGGGCAAC  
 AGTAACATTAGTGATGCATGTATAGGACCAGTGTGAGCGCGGTATTTTGGTAGGGCCAGAAATCAAG  
 TGACACAAATGATGAGCCAGACATTACATAAGCCAAACACAGGCTCCACCTCCCAATGACGCTCA  
 ACACCGAGTAACCAGATACAGCAATATGCACTACTCCCGACAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG220643 representing NM\_181564  
 Red=Cloning site Green=Tags(s)

MDWLLFRNICLLILFMVVLGVNSEFIVEVKELDIENGTWQTVRRQKREWIKFAAACREGEDNSKRNPI  
 ARIRSDCEVSQRITYRISGAGIDRPPYGVFTINPRTGEINITSVVDREITPLFLIHCRAALNSRGEDLERP  
 LELRVKVMVDVNDNPPVFTQNVYTAIEENSANALVVKLSATDADEDNHLNSKIAYKIIISQEPAGAPMFM  
 VNRYTGEVRTMSNFLDREQHSMYNLLVRGSDRDGATDGLSSECDRIKILDVNDNFPILKTSYSASIEE  
 NCLSSELIRLQAIDLDEEGTDNWLQAQYILSGNDGNWFEIQDTPKTNEGILKVVKMLDYEQEPNIYLSIG  
 VRNQAEFHHSVASQFMHSTPVRIVVNVREGPTFSPTMTFLRGGMRGASLMNYVLGTYAIDMDTGN  
 PATNVRYVIGHDAGSWLKVDSRTGEIQFSREFDMKSKYITDGIYAAQILAIIDDGSGRTATGTICIEIPDA  
 NDYCPVIYAESRSVCTHASSVRIYVNDHSFGSPFTFCVVDSPDIANIWDIRSINGTSAILMTEQTLSPG  
 PYQIPILVKDSHNRACELPQTVLLDACFCDDHHVCLHSSTTGIYTDITWVDDMYGTVTDDGVRQSNVG  
 LGPAGIGMIILGLLLLLLSPLLLLMCCCKRRQPEGLGTRFAPVPEGGEGVMQPWRIEGAHPEDRDVSNIC  
 VPMTASNTQDRIDSSEIYNTYAGGGTVEGGVSGVELNTGVGTATGMVAAGATGTLRKRSSITIGTLREYQ  
 DTGMNMAFLDSYFSEKAYAYADEDEGRANDCLLIYDHEGAGSPVGSIGCCSWIVDDLDESUYIETLDPKF  
 RTLAEICLDTEIEPFPHQACIPISTDLPLLPNYFVNESSGMTLSEAEFQAEMAAASEPMIHGDIIVTE  
 TYTTSDDPCVQPTTIVFDSQIPPNVVVTEVMAPVYDVQGNICVPAEIANHNVVYAERVVASPGIPDMGN  
 SNISDACIGPVMGGILVGPEIQVTQMMSPDIIHSQTTGTSPTMSQHRVTRYSNMHYSRQ

TRTRPLE - GFP Tag - V

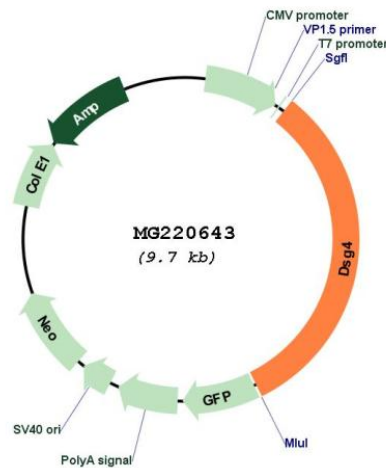
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_181564

ORF Size: 3123 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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_181564.2</a> , <a href="#">NP_853543.1</a>
<b>RefSeq Size:</b>	3478 bp
<b>RefSeq ORF:</b>	3126 bp
<b>Locus ID:</b>	16769
<b>UniProt ID:</b>	<a href="#">Q7TMD7</a>
<b>Cytogenetics:</b>	18 11.35 cM
<b>Gene Summary:</b>	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. This gene is expressed in the suprabasal epidermis and hair follicle. The encoded preproprotein undergoes proteolytic processing to generate a mature, functional protein. Certain mutations in this gene are responsible for the lanceolate hair phenotype in mice. This gene is located in a cluster of desmosomal cadherin genes on chromosome 18. [provided by RefSeq, Feb 2016]