

Product datasheet for **MR211082**

Dag1 (NM_010017) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dag1 (NM_010017) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dag1
Synonyms:	D9Wsu13; D9Wsu13e; DG; Dp71; Dp427
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR211082 representing NM_010017
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTGTGGACAACTGGCTACTGCACCCCTCTGGGACAGACCTTTCTCCTCCTGTCTGTGGCTG
 TGGCTCAGGCCCACTGGCCCACTGAACCCCTCAGAGGCTGTGAGGGACTGGAAGAACCAGCTTGAGGCGTC
 CATGCACTCAGTTCTCTCCGACTTCCAGGAGGCTGTTCCACCGTGGTTGGCATTCCAGACGGTACGGCT
 GTTGTGCGGGCGCTCATTTGAGTGAGCATTCCAACGGATTTAATTGCCTCCAGTGGGAGATCATCAAGG
 TGTCTGCAGCAGGAAGGAGGCCCTTACCGTCTTGGCTACACTGGGACCCACACAGTCATATTTGGAAGG
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 CTGTACGGGCAGCCTCATCAGACCCTGGTGGTGTGAGTGTGATCTGCCTGTGCTGTGATGAGCCAGTGAC
 TGTCTTACAGTGATTCTGGATGTGACCTCACCAAGATGACCCAAAGCAAAGGATCGATCTGTTGAAC
 AGAATGCAGAGCTTCTCAGAAGTAGAATTCCACAACATGAAGTTGGTGCCTGTAGTGAATAATAGACTAT
 TTGACATGTCCGGCTTTCATGGCTGGCCAGGAAATGCAAAGAAAGTGGTAGAATGGGGCTCTCCTGTG
 CTGAAACTAGGCTGCTCCTTGAACCAGAATAGCGTCCCTGACATCCGTGGTGTAGAAACCCCTGCTAGG
 GAGGGTGTATGTCTGCCCAACTTGGTTATCCTGTGGTGGGTGGCACATTGCCAATAAGAAGCCCACTC
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 ACCATGGCTCCTCCTGTGAGGGATCCTGTTCCAGGAAGCCACGGTACCATTCCGACGCGAGGTGCCA
 TTATTCAGACCCCAACTCTGGGCCCTATCCAGCCTACTCGGGTGTGAGAAGCTGGTACCAGGTTCTGG
 CCAGATTCGCCCAACACTGACAATTCTGGCTATGTAGAGCCACAGCCGTTATTACTCCTCCAACAACCT
 ACCACAAGAAGCCACGAGTGTCCACGCCAAAGCCAGCAACGCCTTCAACTGATTCGTCAACTACCACA
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 GGCTGCCTGACAGCAGCCATGTGGGAAAACATGAGTATTTATGCATGCCACAGACAAAGGGGCTCT
 CCGCTGTGGATGCCTTCGAGATCCATGTTCAAGCGCCACAAGGGGACAAAGGCTCCTGCACGGTTCAA
 GGCCAGGCTTGCAGGGATCCAGCACCGGTGGTGAATGACATTCAAGAAGAAATTGCTTTGGTAAAGAAG
 CTAGCTTTTGGTTTGGGGATCGAACTGCAGCTCCATCACCCCTCAGAACATCACTCGGGGCTCTATCG
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 CCCTCCGATGTTCCCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR211082 representing NM_010017
 Red=Cloning site Green=Tags(s)

MSVDNLLHPLWGQTFLLLLSVAVAQAHWPSEPSEAVRDWKNQLEASMHSVL SDFQEAVPTVVGIPDGTA
 VVGRSFRVSIPTDLIASSGEI IKVSAAGKEALPSWLHWDPHSHILEGLPLDTKGVHYISVSAARLGANG
 SHVPQTSSVFSIEVYPEDHNEPQSVRAASSDPGEVVP SACAADPEVTVLTVILDADLTKMTPKQRIDLLN
 RMQSFSEVELHNMKLPVVNNRFLDMSAFMAGPGNAKKVVENGALLSWKLGCSLNQNSVPDIRGVETPAR
 EGAMSAQLGYPVVGWHIANKKPTLPKRLRRQIHATPTPVTAIGPPTTAIQEPPSRIVPTPTSPAIAAPTE
 TMAPPVRDPVPGKPTVTIRTRGAI IQTPTLGPIQPTRVSEAGTTVPGQIRPTLTIPGYVEPTAVITPPTT
 TTKKPRVSTPKPATPSTDSSTTTTRRPTKPRTPRPVPRVTTKAPITRLETASPPTRIRTTTSGVPRGGE
 PNQRPELKNHIDRVDAWVGTYFEVKIPSDTFYDNEDTTT DKLKLTLKLEQQLVGEKSWVQFNNSQLMY
 GLPDSSSHVGKHEYFMHATDKGGLSAVDAFEI HVHHRPQGDKAPARFKARLAGDPAPVVNDIHKKIALVKK
 LAFAFGDRNCSSITLQNI TRGSIVVEWNTNLTLPLEPCKEQI IGLSRRIADENKPRPAF SNALEPDFKA
 LSI AVTGS GSCRHLQFIPVAPSPGSSAAPATEV PDRDPEKSS EDDVYLHTVIPAVVVAAILLIAGI IAM
 ICYRKKRKGKLTLEDQATFIKKGVP IIFADELDDSKPPPSSMPLILQE EKAPLPPPEYPNQSM PETTPL
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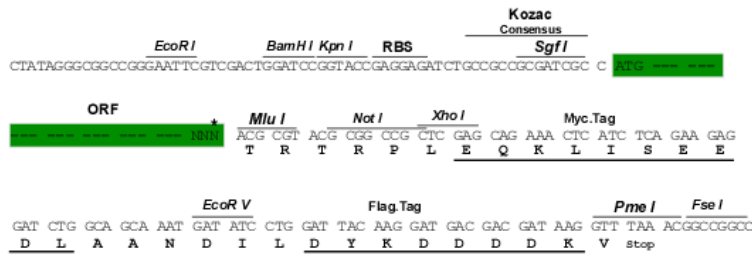
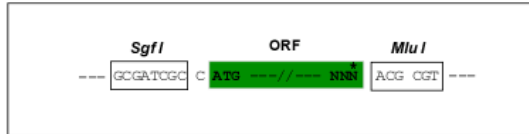
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9006_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

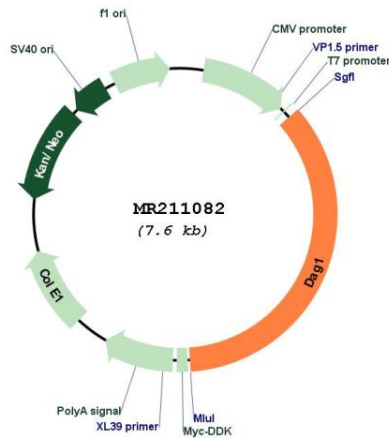
ACCN: NM_010017

ORF Size:	2679 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 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:	<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:	<u>NM_010017.4</u> , <u>NP_034147.1</u>
RefSeq Size:	5591 bp
RefSeq ORF:	2682 bp
Locus ID:	13138
UniProt ID:	<u>Q62165</u>
Cytogenetics:	9 59.08 cM
MW:	97.4 kDa

Gene Summary:

This gene encodes dystroglycan, a central component of dystrophin-glycoprotein complex that links the extracellular matrix and the cytoskeleton in the skeletal muscle. The encoded preproprotein undergoes O- and N-glycosylation, and proteolytic processing to generate alpha and beta subunits. A complete lack of the encoded protein in mice results in embryonic lethality due to the disorganization of Reichert's membrane. Chimeric mice deficient in the encoded protein overcome embryonic lethality but develop a progressive muscular dystrophy. Alternative splicing results in multiple transcript variants, all encoding the same protein. [provided by RefSeq, Nov 2015]

Product images:



Circular map for MR211082