

## Product datasheet for **SC117393**

### Alpha Dystroglycan (DAG1) (NM\_004393) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Alpha Dystroglycan (DAG1) (NM_004393) Human Untagged Clone
Tag:	Tag Free
Symbol:	Alpha Dystroglycan
Synonyms:	156DAG; A3a; AGRNR; DAG; LGMDR16; MDDGA9; MDDGC7; MDDGC9
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_004393, the custom clone sequence may differ by one or more nucleotides

```

ATGAGGATGTCTGTGGGCTCTCGTGCTGCTGCCCTCTGGGGAGGACCTTTCTCCTCTGCTCTCTG
TGGTTATGGCTCAGTCCCCTGCCCCAGTGAACCCTCAGAGGCTGTCAGGGACTGGGAAAACAGCTTGA
GGCATCCATGCACCTCAGTCTCAGACCTCCACGAGGCTGTTCCACAGTGGTTGGCATTCTGATGGC
ACGGCTGTCGTCGGGCGCTCATTTTCGAGTGACCATTCCAACAGATTTGATTGCCTCCAGTGGAGATATCA
TCAAGGTATCAGCGGCAGGGAAGGAGGCTTTGCCATCTTGGCTGCACTGGGACTCACAGAGCCACACCTT
GGAGGGCTCCCCCTTGACACTGATAAGGGTGTGCATTACATTTTCAGTGAGCGCTACACGGCTGGGGCC
AACGGGAGCCACATCCCCAGACCTCCAGTGTGTTCTCCATCGAGGTCTACCCTGAAGACCACAGTGAGC
TGCAGTCGGTGAGGACAGCCTCCCAGACCTGGTGAGGTGGTATCATCTGCCTGTGCTGCGGATGAACC
TGTGACTGTTTTGACGGTGATTTTGGATGCCGACCTACCAAGATGACCCCAAAGCAAAGGATTGACCTC
CTGCACAGGATGCGGAGCTTCTCAGAAGTAGAGCTTCAACAATGAAATTAGTCCGGTGGTGAATAACA
GACTATTTGACATGTCCGCTTCATGGCTGGCCCGGAAATGCAAAAAGGTGGTGGAGAATGGGGCCCT
TCTCTCCTGGAAGCTGGGCTGCTCCCTGAACCAGAACAGTGTGCCTGACATTCATGGTGTAGAGGCCCT
GCCAGGGAGGGCCAATGTCTGCTCAGCTTGGCTACCCTGTGGTGGGTTGGCACATCGCCAATAAGAAGC
CCCCTCTTCCAAACGCGTCCGGAGGCAGATCCATGCTACACCCACACCTGTCACTGCCATTGGGCCCC
AACCACGGCTATCCAGGAGCCCCATCCAGGATCGTGCCAACCCACATCTCCAGCCATTGCTCCTCCA
ACAGAGACCATGGCTCCTCCAGTCAGGGATCCTGTTCTGGGAAACCCACGGTACCATCCGGACTCGAG
GCGCCATTATTCAAACCCCAACCCTAGGCCCATCCAGCCTACTCGGGTGTGAGAAGCTGGCACCACAGT
TCCTGGCCAGATTCGCCAACGATGACCATTCTGGCTATGTGGAGCCTACTGCAGTTGCTACCCCTCC
ACAACACCACCAAGAAGCCACGAGTATCCACACCAAAACAGCAACGCCTTCAACTGATCCACCACCA
CCACGACTCGCAGGCCAACCAAGAAACACGGACACCCCGCCAGTGCCTGGGTACCACCAAAGTTTC
CATCACCAGATTGAAACTGCCTCACCGCTACTCGTATTCGCACCACCACAGTGGAGTGCCTGGTGGC
GGAGAACCAACAGCGCCAGAGCTCAAGAACCATATTGACAGGGTAGATGCCTGGGTTGGCACCTACT
TTGAGGTGAAGATCCCGTCCAGACTTTCTATGACCATGAGGACACCACACTGACAAGTGAAGCTGAC
CCTGAAACTGCGGGAGCAGCAGCTGGTGGGCGAGAAGTCTGGGTACAGTTCAACAGCAACAGCCAGCTC
ATGTATGGCTTCCCGACAGCAGCCACGTGGGCAACACGAGTATTTTCATGCATGCCACAGACAAGGGG
GCCTGTGGCTGTGGATGCCTTCGAGATCCACGTCCACAGGCGCCCCAAGGGGATAGGGCTCCTGCAAG
GTTCAAGGCCAAGTTTGTGGGTGACCCGCACTGGTGTGAATGACATCCACAAGAAGATTGCCTTGGTA
AAGAAACTGGCCTTCGCCTTTGGAGACCGAAACTGTAGCACCATACCCTGCAGAATATCACCCGGGGCT
CCATCGTGGTGAATGGACCAACAACACTGCCCTTGGAGCCCTGCCCAAGGAGCAGATCGCTGGGCT
GAGCCGCCGGATCGCTGAGGATGATGGAAAACCTCGGCCCTGCCTTCTCCAACGCCCTAGAGCCTGACTTT
AAGGCCACAAGCATCACTGTGACGGGCTCTGGCAGTTGTGCGCACCTACAGTTTATCCCTGTGGTACCAC
CCAGGAGAGTGCCTCAGAGGCGCCGCCACAGAAGTGCCTGACAGGGACCCTGAGAAGAGCAGTGAGGA
TGATGTCTACCTGCACACAGTCAATCCGGCCGTGGTGGTGCAGCCATCCTGCTCATTGCTGGCATTATT
GCCATGATCTGCTACCGCAAGAAGCGGAAGGGCAAGCTTACCCTTGAGGACCAGGCCACCTTCATCAAGA
AGGGGGTGCCTATCATCTTTGCAGACGAACTGGACGACTCCAAGCCCCACCCTCCTCCAGCATGCCACT
CATTCTGAGGAGGAGAAGGCTCCCTACCCCTCCTGAGTACCCCAACCAGAGTGTGCCGAGACCACT
CCTCTGAACCAGGACACCATGGGAGAGTACACGCCCTGCGGGATGAGGATCCCAATGCGCCTCCCTACC
AGCCCCACCGCCTTACAGCACCCATGGAGGGCAAGGGCTCCCGTCCCAAGAACATGACCCCATACCG
GTCACCTCCTCCCTATGTCCACCTTAA
    
```

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_004393 unedited</p> <pre> CTTTGGATTTTGTAAACACGACTCACTATGGGCGGCACGCGATTTCGGCACGAGGGCGGCGC TCGCGCCTCTTATGCTTGGCGGTGGCGGCGGCGGAGCTTCGCGCCAATCCCCGGGGAG CGGCGGTGGCGGCGTCTGGGGCCAGGAGGAGCGAACACCTGCCGCATTCCTCCCGCCGG CGCTGGGCTCTGTGTCTCCGGGATGGAGCAGGTGTGCAGAGGGTGAGAACCCAGCTCTG GGACCAAGTCACTTGCTTCCTTACTTAGCAAGACTATCGACTTGAGCAAACCTTGGACCTG GGATGAGGATGTCTGTGGGCTCTCGCTGCTGCCCTCTGGGGGAGGACCTTTCTCC TCCTGCTCTGTGGTTATGGCTCAGTCCCACTGGCCCACTGAACCCTCAGAGGCTGTCA GGGACTGGGAAAACAGCTTGAGGCATCCATGCACTCAGTGCTCTCAGACCTCCACGAGG CTGTTCCACAGTGGTTGGCATTCTGATGGCACGGCTGTGTCGGGCGCTCATTTCGAG TGACCATTCCAACAGATTTGATTGCCTCCAGTGGAGATATCATCAAGGTATCAGCGGCAG GGAAGGAGGCTTTGCCATCTTGGCTGCACTGGGACTCACAGAGCCACACCCTGGAGGGCC TCCCCCTTGACACTGTAAGGGTGTGCATTACATTTCACTGAGCGCTACACGGCTGNGGC CAACGGGAGCCACATCCNCCAGACCTCCAGTGTGTTCTCAATCGAGGTCTACCCTGGAGA CACAGTGAGCTGCAGTCGGTGGAGGACAGCCTCCAGACCTGGGGGAGGTGTATCATCTG CCTGTGCTGGGGATGACCTGTGACTGTTTTGACGGTGGATTTGGAATGCCGCCCTTACAA GATGACCCCAAAAACAAAGATGACCTCCTGCACAGGATGCGGACCT </pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_004393 unedited</p> <pre> TTTAGCTATGGCACGCGGCACGCAATCTAGTATCGAGTCTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTCCCAATTAATAATCTTTTTTTAATAAAAACAATTGGAGGCTGTATAAA AACTTTAGAAAAAATTACCTTTGAAAGCTAACAATTTTTATTATGAACTATGGCTGGC ACTCCTCCCAGCCGCCAACCTTTCCAGTATTCAGGCCCAAGGCCTGGGACTGGAGG GCCAAAAAAAAGGGATGGGGGGGTGCGGGCAGGACTGGGGACTGTTAGGACAAAAGCGGC CAAGGTCAAGGGAGGAAAGAGCATCCCATGACATAAAAAATATTGCTTCTTACCAAAAATG TCCCCCACTGAGGGTTTCAAAAAACCGGATATTCCTTTTAGGAGGAAAAAAAACCAA GGCCCAAAAAAGGGTAAACAAAATAGGTTGATGGGGGGGAAACCTTTGACCTCCCAGG GGCCCCACAAGCAGTTGGCCACCCTGGAGCACCAAAGTTGGGGGCCACAGCCACCATT GCCTTTTGGAGTCCCTTTTTCATGGAAATGAAAACCCCTTGGCCGGGGCCCACTAGTGTA CATGGGCTGGAAGGGGGATGCCACGGCCCAAGAAACCCCTTCCACCCCTTCCACCCCTGG TATTAGTGGGTGATCAAACCCCGCCCAAGGACCTTGGCGTGACCCACGGCCGTGAGGCC CCAATAACGCTTTTGGTGTCTCCTAACCCCACTGCTGCCCGCCGCGGAAAAAATTTTT CCCCTTGAATAAAAAACCGGTCCCTTGGGCTCTCTAAGTCGCAAACCCGCGGAAGCCT ATTTCTAGCAAAGCCTTTCTCCATCCCCCCCCAAATATTATCCCTCCAAGCTTTGGTAAA CAGTCTTTATATTCGTTACCCCTCACGCCAATCCGCCAAAGCCCTTCAACAAACATC TTATTTAC </pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_004393
<b>Insert Size:</b>	4230 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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).

**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\\_004393.1](#), [NP\\_004384.1](#)

**RefSeq Size:** 5493 bp

**RefSeq ORF:** 2688 bp

**Locus ID:** 1605

**UniProt ID:** [Q14118](#)

**Cytogenetics:** 3p21.31

**Domains:** CADG

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

**Protein Pathways:** Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, ECM-receptor interaction, Hypertrophic cardiomyopathy (HCM), Viral myocarditis

**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. Certain mutations in this gene are known to cause distinct forms of muscular dystrophy. Alternative splicing results in multiple transcript variants, all encoding the same protein. [provided by RefSeq, Nov 2015]  
Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. All variants encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.