

Product datasheet for **SC314282**

Dystrophin (DMD) (NM_004016) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dystrophin (DMD) (NM_004016) Human Untagged Clone
Tag:	Tag Free
Symbol:	DMD
Synonyms:	BMD; CMD3B; DXS142; DXS164; DXS206; DXS230; DXS239; DXS268; DXS269; DXS270; DXS272; MRX85
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

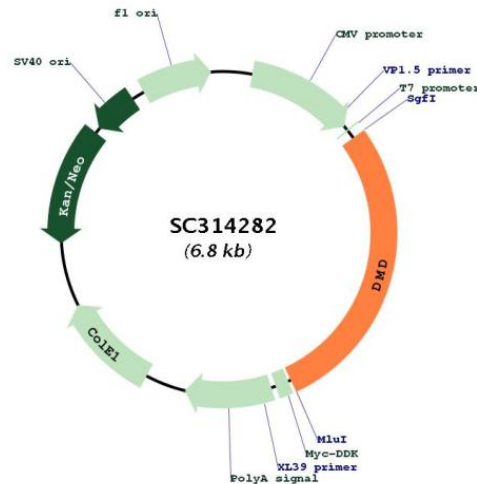


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Fully Sequenced ORF: >SC314282 representing NM_004016.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGAGGGAACAGCTCAAAGGCCACGAGACTCAAACAACCTTGTGGGACCATCCAAAAATGACAGAGCTC
TACCAGCTTTAGCTGACCTGAATAATGTCAGATTCTCAGCTTATAGGACTGCCATGAAACTCCGAAGA
CTGCAGAAGGCCCTTTGCTTGGATCTCTTGAGCCTGTCAGCTGCATGTGATGCCTTGACCAGCACAA
CTCAAGCAAAATGACCAGCCCATGGATATCCTGCAGATTATTAATTGTTTGACCACTATTTATGACCGC
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_004016

Insert Size: 1908 bp

OTI Disclaimer: 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_004016.2](#)

RefSeq Size: 4591 bp

RefSeq ORF: 1908 bp

Locus ID: 1756

UniProt ID: [P11532](#)

Cytogenetics: Xp21.2-p21.1

Domains:	ZnF_ZZ
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Viral myocarditis
MW:	72.2 kDa
Gene Summary:	<p>This gene spans a genomic range of greater than 2 Mb and encodes a large protein containing an N-terminal actin-binding domain and multiple spectrin repeats. The encoded protein forms a component of the dystrophin-glycoprotein complex (DGC), which bridges the inner cytoskeleton and the extracellular matrix. Deletions, duplications, and point mutations at this gene locus may cause Duchenne muscular dystrophy (DMD), Becker muscular dystrophy (BMD), or cardiomyopathy. Alternative promoter usage and alternative splicing result in numerous distinct transcript variants and protein isoforms for this gene. [provided by RefSeq, Dec 2016]</p> <p>Transcript Variant: Dp71 transcripts use exons 63-79 with a novel 80- to 100-nt exon containing an ATG start site for a new coding sequence of 17 nt. The short coding sequence is in-frame with the consecutive dystrophin sequence from exon 63. Differential splicing of exons 71 and 78 produces at least four Dp71 isoforms. Of these, this transcript (Dp71b) lacks exon 78 and encodes a protein with a different C-terminus than Dp71 and Dp71a isoforms.</p>