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Product datasheet for SC303421

Dystrophin (DMD) (NM_004011) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Dystrophin (DMD) (NM_004011) Human Untagged Clone

Tag: Tag Free

Symbol: DMD

Synonyms: BMD; CMD3B; DXS142; DXS164; DXS206; DXS230; DXS239; DXS268; DXS269; DXS270; DXS272; MRX85

Vector: pCMV6 series

Fully Sequenced ORF:

>NCBI ORF sequence for NM_004011, the custom clone sequence may differ by one or more nucleotides

ATGACTGAGATGATTTTGCTAATTTTTTTTCCAGCCTATTTCCTTAATGCTGTAAGGAGG
CAAAAGTTGCTTGAACAGAGCATCCAGTCTGCCCAGGAGACTGAAAAATCCTTACACTTA
ATCCAGGAGTCCCTCACATTCATTGACAAGCAGTTGGCAGCTTATATTGCAGACAAGGTG
GACGCAGCTCAAATGCCTCAGGAAGCCCAGAAAATCCAATCTGATTTGACAAGTCATGAG
ATCAGTTTAGAAGAAATGAAGAAACATAATCAGGGGAAGGAGGCTGCCCAAAGAGTCCTG
TCTCAGATTGATGTTGCACAGAAAAAATTACAAGATGTCTCCATGAAGTTTCGATTATTC
CAGAAACCAGCCAATTTTGAGCAGCGTCTACAAGAAAGTAAGATGATTTTAGATGAAGTG
AAGATGCACTTGCCTGCATTGGAAACAAAGAGTGTGGAACAGGAAGTAGTACAGTCACAG
CTAAATCATTGTGTGAACTTGTATAAAAGTCTGAGTGAAGTGAAGTCTGAAGTGGAAATG
GTGATAAAGACTGGACGTCAGATTGTACAGAAAAAGCAGACGGAAAATCCCAAAGAACTT
GATGAAAGAGTAACAGCTTTGAAATTGCATTATAATGAGCTGGGAGCAAAGGTAACAGAA
AGAAAGCAACAGTTGGAGAAATGCTTGAAATTGTCCCGTAAGATGCGAAAGGAAATGAAT
GTCTTGACAGAATGGCTGGCAGCTACAGATATGGAATTGACAAAGAGATCAGCAGTTGAA
GGAATGCCTAGTAATTTGGATTCTGAAGTTGCCTGGGGAAAGGCTACTCAAAAAGAGATT
GAGAAACAGAAGGTGCACCTGAAGAGTATCACAGAGGTAGGAGAGGCCTTGAAAACAGTT
TTGGGCAAGAAGGAGACGTTGGTGGAAGATAAACTCAGTCTTCTGAATAGTAACTGGATA
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GAAACTTTTGACCAGAATGTGGACCACATCACAAAGTGGATCATTCAGGCTGACACACTT
TTGGATGAATCAGAGAAAAAGAAACCCCAGCAAAAAGAAGACGTGCTTAAGCGTTTAAAG
GCAGAACTGAATGACATACGCCCAAAGGTGGACTCTACACGTGACCAAGCAGCAAACTTG
ATGGCAAACCGCGGTGACCACTGCAGGAAATTAGTAGAGCCCCAAATCTCAGAGCTCAAC
CATCGATTTGCAGCCATTTCACACAGAATTAAGACTGGAAAGGCCTCCATTCCTTTGAAG
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AAGGATTTGAGGTCTCAAAGAAGAAAAAAGGCTCTAGAAATTTCTCATCAGTGGTATCAG
TACAAGAGGCAGGCTGATGATCTCCTGAAATGCTTGGATGACATTGAAAAAAAATTAGCC

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AGCCTACCTGAGCCCAGAGATGAAAGGAAAATAAAGGAAATTGATCGGGAATTGCAGAAG
AAGAAAGAGGAGCTGAATGCAGTGCGTAGGCAAGCTGAGGGCTTGTCTGAGGATGGGGCC
GCAATGGCAGTGGAGCCAACTCAGATCCAGCTCAGCAAGCGCTGGCGGGAAATTGAGAGC
AAATTTGCTCAGTTTCGAAGACTCAACTTTGCACAAATTCACACTGTCCGTGAAGAAACG
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CAGAAGCAGAACGATGTACATAGGGCCTTCAAGAGGGAATTGAAAACTAAAGAACCTGTA
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GCAGAATATGACCGTCTAAAGCAGCAGCACGAACATAAAGGCCTGTCCCCACTGCCGTCC
CCTCCTGAAATGATGCCCACCTCTCCCCAGAGTCCCCGGGATGCTGAGCTCATTGCTGAG
GCCAAGCTACTGCGTCAACACAAAGGCCGCCTGGAAGCCAGGATGCAAATCCTGGAAGAC
CACAATAAACAGCTGGAGTCACAGTTACACAGGCTAAGGCAGCTGCTGGAGCAACCCCAG
GCAGAGGCCAAAGTGAATGGCACAACGGTGTCCTCTCCTTCTACCTCTCTACAGAGGTCC
GACAGCAGTCAGCCTATGCTGCTCCGAGTGGTTGGCAGTCAAACTTCGGACTCCATGGGT
GAGGAAGATCTTCTCAGTCCTCCCCAGGACACAAGCACAGGGTTAGAGGAGGTGATGGAG
CAACTCAACAACTCCTTCCCTAGTTCAAGAGGAAGAAATACCCCTGGAAAGCCAATGAGA
GAGGACACAATGTAG

Restriction Sites: Please inquire

ACCN: NM_004011

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_004011.1, NP_004002.1
RefSeq Size:	9773 bp
RefSeq ORF:	9771 bp
Locus ID:	1756
UniProt ID:	P11532
Cytogenetics:	Xp21.2-p21.1
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Viral myocarditis
Gene Summary:	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] Transcript Variant: transcript Dp260-1 uses exons 30-79, and originates from a promoter/exon 1 sequence located in intron 29 of the dystrophin gene. As a result, Dp260-1 contains a 95 bp exon 1 encoding a unique N-terminal 16 aa MTEIILLIFFPAYFLN-sequence that replaces amino acids 1-1357 of the full-length dystrophin product (Dp427m isoform). 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.