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Product datasheet for SC303423

Dystrophin (DMD) (NM_004014) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dystrophin (DMD) (NM_004014) Human Untagged Clone
Tag:	Tag Free
Symbol:	DMD
Synonyms:	BMD; CMD3B; DXS142; DXS164; DXS206; DXS230; DXS239; DXS268; DXS269; DXS270; DXS272; MRX85
Vector:	pCMV6 series

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_004014, the custom clone sequence may differ by one or more nucleotides

ATGTTACACAGGAAGACATACCATGTAAAGGACCTCCAAGGTGAAATTGAAGCTCACACA
GATGTTTATCACAACCTGGATGAAAACAGCCAAAAAATCCTGAGATCCCTGGAAGGTTCC
GATGATGCAGTCCTGTTACAAAGACGTTTGGATAACATGAACTTCAAGTGGAGTGAACTT
CGGAAAAAGTCTCTCAACATTAGGTCCCATTTGGAAGCCAGTTCTGACCAGTGGAAGCGT
CTGCACCTTTCTCTGCAGGAACTTCTGGTGTGGCTACAGCTGAAAGATGATGAATTAAGC
CGGCAGGCACCTATTGGAGGCGACTTTCCAGCAGTTCAGAAGCAGAACGATGTACATAGG
GCCTTCAAGAGGGAATTGAAAACTAAAGAACCTGTAATCATGAGTACTCTTGAGACTGTA
CGAATATTTCTGACAGAGCAGCCTTTGGAAGGACTAGAGAAACTCTACCAGGAGCCCAGA
GAGCTGCCTCCTGAGGAGAGAGCCCAGAATGTCACTCGGCTTCTACGAAAGCAGGCTGAG
GAGGTCAATACTGAGTGGGAAAAATTGAACCTGCACTCCGCTGACTGGCAGAGAAAAATA
GATGAGACCCTTGAAAGACTCCAGGAACTTCAAGAGGCCACGGATGAGCTGGACCTCAAG
CTGCGCCAAGCTGAGGTGATCAAGGGATCCTGGCAGCCCGTGGGCGATCTCCTCATTGAC
TCTCTCCAAGATCACCTCGAGAAAGTCAAGGCACTTCGAGGAGAAATTGCGCCTCTGAAA
GAGAACGTGAGCCACGTCAATGACCTTGCTCGCCAGCTTACCACTTTGGGCATTCAGCTC
TCACCGTATAACCTCAGCACTCTGGAAGACCTGAACACCAGATGGAAGCTTCTGCAGGTG
GCCGTCGAGGACCGAGTCAGGCAGCTGCATGAAGCCCACAGGGACTTTGGTCCAGCATCT
CAGCACTTTCTTTCCACGTCTGTCCAGGGTCCCTGGGAGAGAGCCATCTCGCCAAACAAA
GTGCCCTACTATATCAACCACGAGACTCAAACAACTTGCTGGGACCATCCCAAAATGACA
GAGCTCTACCAGTCTTTAGCTGACCTGAATAATGTCAGATTCTCAGCTTATAGGACTGCC
ATGAAACTCCGAAGACTGCAGAAGGCCCTTTGCTTGGATCTCTTGAGCCTGTCAGCTGCA
TGTGATGCCTTGGACCAGCACAACCTCAAGCAAAATGACCAGCCCATGGATATCCTGCAG
ATTATTAATTGTTTGACCACTATTTATGACCGCCTGGAGCAAGAGCACAACAATTTGGTC
AACGTCCCTCTCTGCGTGGATATGTGTCTGAACTGGCTGCTGAATGTTTATGATACGGGA
CGAACAGGGAGGATCCGTGTCCTGTCTTTTAAAACTGGCATCATTTCCCTGTGTAAAGCA
CATTTGGAAGACAAGTACAGATACCTTTTCAAGCAAGTGGCAAGTTCAACAGGATTTTGT
GACCAGCGCAGGCTGGGCCTCCTTCTGCATGATTCTATCCAAATTCCAAGACAGTTGGGT
GAAGTTGCATCCTTTGGGGGCAGTAACATTGAGCCAAGTGTCCGGAGCTGCTTCCAATTT
GCTAATAATAAGCCAGAGATCGAAGCGGCCCTCTTCCTAGACTGGATGAGACTGGAACCC
CAGTCCATGGTGTGGCTGCCCGTCCTGCACAGAGTGGCTGCTGCAGAAACTGCCAAGCAT
CAGGCCAAATGTAACATCTGCAAAGAGTGTCCAATCATTGGATTCAGGTACAGGAGTCTA
AAGCACTTTAATTATGACATCTGCCAAAGCTGCTTTTTTTCTGGTCGAGTTGCAAAAGGC
CATAAAATGCACTATCCCATGGTGGAATATTGCACTCCGACTACATCAGGAGAAGATGTT
CGAGACTTTGCCAAGGTACTAAAAAACAAATTTCGAACCAAAAGGTATTTTGCGAAGCAT
CCCCGAATGGGCTACCTGCCAGTGCAGACTGTCTTAGAGGGGGACAACATGGAAACTCCC
GTTACTCTGATCAACTTCTGGCCAGTAGATTCTGCGCCTGCCTCGTCCCCTCAGCTTTCA
CACGATGATACTCATTCACGCATTGAACATTATGCTAGCAGGCTAGCAGAAATGGAAAAC
AGCAATGGATCTTATCTAAATGATAGCATCTCTCCTAATGAGAGCATAGATGATGAACAT
TTGTTAATCCAGCATTACTGCCAAAGTTTGAACCAGGACTCCCCCCTGAGCCAGCCTCGT
AGTCCTGCCCAGATCTTGATTTCCTTAGAGAGTGAGGAAAGAGGGGAGCTAGAGAGAATC
CTAGCAGATCTTGAGGAAGAAAACAGGAATCTGCAAGCAGAATATGACCGTCTAAAGCAG
CAGCACGAACATAAAGGCCTGTCCCCACTGCCGTCCCCTCCTGAAATGATGCCCACCTCT
CCCCAGAGTCCCCGGGATGCTGAGCTCATTGCTGAGGCCAAGCTACTGCGTCAACACAAA
GGCCGCCTGGAAGCCAGGATGCAAATCCTGGAAGACCACAATAAACAGCTGGAGTCACAG
TTACACAGGCTAAGGCAGCTGCTGGAGCAACCCCAGGCAGAGGCCAAAGTGAATGGCACA
ACGGTGTCCTCTCCTTCTACCTCTCTACAGAGGTCCGACAGCAGTCAGCCTATGCTGCTC
CGAGTGGTTGGCAGTCAAACTTCGGACTCCATGGGTGAGGAAGATCTTCTCAGTCCTCCC
CAGGACACAAGCACAGGGTTAGAGGAGGTGATGGAGCAACTCAACAACTCCTTCCCTAGT
TCAAGAGGAAGAAATACCCCTGGAAAGCCAATGAGAGAGGACACAATGTAG

Restriction Sites: Please inquire

ACCN:	NM_004014
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_004014.1, NP_004005.1
RefSeq Size:	5623 bp
RefSeq ORF:	2871 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 Dp116 uses exons 56-79, starting from a promoter/exon 1 within intron 55. As a result, the Dp116 isoform contains a unique N-terminal MLHRKTYHVK aa sequence, instead of aa 1-2739 of dystrophin. Differential splicing produces several Dp116-subtypes. The Dp116 isoform is also known as S-dystrophin or apo-dystrophin-2. This variant was curated in collaboration with Johann den Dunnen. 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.