

## Product datasheet for **RC215403**

### Dystrophin (DMD) (NM\_004019) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dystrophin (DMD) (NM_004019) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dystrophin
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)
ORF Nucleotide Sequence:	>RC215403 representing NM_004019 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGGAACAGCTCAAAGGCCACGAGACTCAAACAACCTGCTGGGACCATCCCAAAATGACAGAGCTCT  
ACCAGTCTTTAGCTGACCTGAATAATGTGAGATTCTCAGCTTATAGGACTGCCATGAAACTCCGAAGACT  
GCAGAAGGCCCTTTGCTTGGATCTCTTGAGCCTGTGAGCTGCATGTGATGCCTTGGACCAGCACAACTC  
AAGCAAAATGACCAGCCCATGGATATCCTGCAGATTATTAATTGTTTGACCACTATTTATGACCGCCTGG  
AGCAAGAGCACAACAATTTGGTCAACGTCCCTCTGCGTGGATATGTGTCTGAAGTGGCTGCTGAATGT  
TTATGATACGGGACGAACAGGGAGGATCCGTGCTCTTTTAAACTGGCATCATTTCCCTGTGTAAA  
GCACATTTGGAAGACAAGTACAGATACCTTTTCAAGCAAGTGGCAAGTTCAACAGGATTTTGTGACCAGC  
GCAGGCTGGGCCCTCTTCTGCATGATTCTATCCAATTCGAAGACAGTTGGGTGAAGTTGCATCCTTTGG  
GGCAGTAACATTGAGCCAAGTGTCCGGAGCTGCTTCCAATTTGCTAATAATAAGCCAGAGATCGAAGCG  
GCCCTCTTCTAGACTGGATGAGACTGGAACCCAGTCCATGGTGTGGCTGCCCGTCTGACAGAGTGG  
CTGCTGCAGAACTGCCAAGCATCAGGCCAAATGTAACATCTGCAAGAGTGTCCAATCATTGGATTGAG  
GTACAGGAGTCTAAAGCACTTTAATTATGACATCTGCCAAAGTGTCTTTTTTCTGGTTCGAGTTGCAAAA  
GGCCATAAAATGCACTATCCCATGGTGGAAATTTGCACTCCGACTACATCAGGAGAAGATGTTTCGAGACT  
TTGCCAAGGTACTAAAAACAAATTTGCAACAAAAGGTATTTTGGCAAGCATCCCCGAATGGGCTACCT  
GCCAGTGCAGACTGTCTTAGAGGGGGACAACATGGAAACG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC215403 representing NM\_004019  
Red=Cloning site Green=Tags(s)

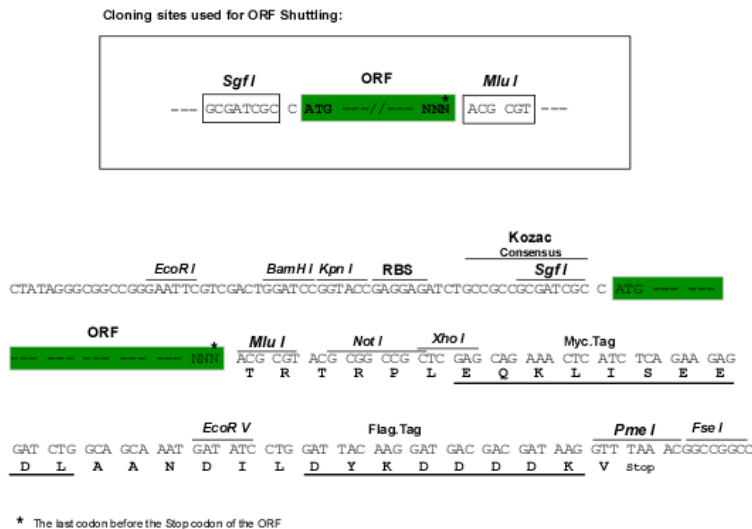
MREQLKGHETQTTCDWHPKMTELYQSLADLNNVRFSAVRTAMKLRRLQKALCLDLLSLSAACDALDQHNL  
 KQNDQPMIDILQIINCLTTIYDRLEQEHNNLVNVPLCVDMLNWLNNVYDTGRTGRIRVLSFKTGIIISLCK  
 AHLEDKYRYLQKQVASTGFCDQRRLLGLLLHDSIQIPRLGEVASFGGSNIEPSVRSCFQFANNKPEIEA  
 ALFLDWMRLEPQSMVWLPVLRVAAAETAKHQAKCNICKECPIIGFRYRSLKHFNYDQCSCFFSGRVAK  
 GHKMHYPMVEYCTPTTSGEDVRDFAKVLKKNKFRTRKRYFAKHPRMGYLPVQTVLEGDNMET

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8053\\_c11.zip](https://cdn.origene.com/chromatograms/mk8053_c11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004019

**ORF Size:** 1020 bp

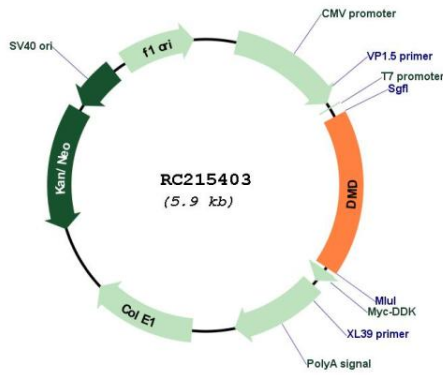
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

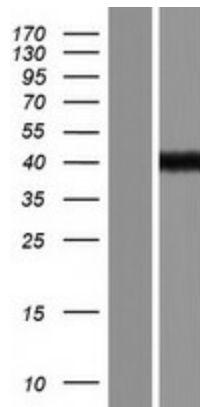
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_004019.3</u>
<b>RefSeq Size:</b>	1634 bp
<b>RefSeq ORF:</b>	1023 bp
<b>Locus ID:</b>	1756
<b>UniProt ID:</b>	<u>P11532</u>
<b>Cytogenetics:</b>	Xp21.2-p21.1
<b>Domains:</b>	ZnF_ZZ
<b>Protein Pathways:</b>	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Viral myocarditis
<b>MW:</b>	39.1 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC215403



Western blot validation of overexpression lysate (Cat# [LY418279]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215403 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).