

Product datasheet for **RC215529**

Dystrophin (DMD) (NM_004018) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dystrophin (DMD) (NM_004018) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC215529 representing NM_004018
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGGAACAGCTCAAAGGCCACGAGACTCAAACAATTGCTGGGACCATCCAAAATGACAGAGCTCT
 ACCAGTCTTTAGCTGACCTGAATAATGTGAGATTCTCAGCTTATAGGACTGCCATGAAACTCCGAAGACT
 GCAGAAGGCCCTTTGCTTGGATCTCTTGAAGCTGTGAGCTGCATGTGATGCCCTGGACCAGCACAACCTC
 AAGCAAAATGACCAGCCCATGGATATCCTGCAGATTATTAATTGTTTGACCACTATTTATGACCGCTGG
 AGCAAGAGCACAACAATTTGGTCAACGTCCCTCTGCGTGGATATGTGTCTGAACTGGCTGCTGAATGT
 TTATGATACGGGACGAACAGGGAGGATCCGTGTCTGTCTTTAAAAGTGGCATCATTTCCCTGTGTAAA
 GCACATTTGGAAGACAAGTACAGATACCTTTTCAAGCAAGTGGCAAGTTCAACAGGATTTTGTGACCAGC
 GCAGGCTGGGCCCTCTTCTGCATGATTCTATCCAATTTCAAGACAGTTGGGTGAAGTTGCATCCTTTGG
 GGGCAGTAACATTGAGCCAAGTGTCCGGAGCTGCTTCCAATTTGTAATAATAAGCCAGAGATCGAAGCG
 GCCCTCTTCTAGACTGGATGAGACTGGAACCCAGTCCATGGTGTGGCTGCCCGTCTGCACAGAGTGG
 CTGCTGCAGAAACTGCCAAGCATCAGGCCAAATGTAACATCTGCAAGAGTGTCCAATCATTGGATTTCAG
 GTACAGGAGTCTAAAGCACTTTAATTATGACATCTGCCAAAGCTGCTTTTTTCTGGTCGAGTTGCAAAA
 GGCCATAAAATGCACTATCCCATGGTGGAAATTTGCACTCCGACTACATCAGGAGAAGATGTTTCGAGACT
 TTGCCAAGGTAATAAAAAAAATTTTGAACAAAAGGATTTTTCGAAGCATCCCCGAATGGGCTACCT
 GCCAGTGCAGACTGTCTTAGAGGGGACAAATGGAAACGCTGCCTCGTCCCCTCAGCTTTCACACGAT
 GATACTCATTACGCATTGAACATTATGCTAGCAGGCTAGCAGAAATGGAAAACAGCAATGGATCCTTATC
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 GAAAGAGGGGAGCTAGAGAGAATCTAGCAGATCTTGGAGGAAAGAAAACAGGAATCTGCAAGCAGAATATG
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 CTCTCCCAGAGTCCCCGGGATGCTGAGCTCATTGCTGAGGCCAAGCTACTGCGTCAACACAAAGGCCGC
 CTGGAAGCCAGGATGCAATCCTGGAAGACCACAATAACAGCTGGAGTACAGTTACACAGGCTAAGGC
 AGCTGCTGGAGCAACCCAGGCAGAGGCCAAAGTGAATGGCACAACGGTGTCTCTCTTCTACCTCTCT
 ACAGAGGTCGACAGCAGTACGCTATGCTGCTCCGAGTGGTGGCAGTCAAACCTCGGACTCCATGGGT
 GAGGAAGATCTTCTCAGTCTCCCAGGACACAAGCACAGGGTTAGAGGAGGTGATGGAGCAACTCAACA
 ACTCTTCCCTAGTTCAAGAGGACACAATGTAGGAAGTCTTTCCACATGCCAGATGATTTGGGCAGAGC
 GATGGAGTCTTAGTATCAGTCATGACAGATGAAGAAGGAGCAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215529 representing NM_004018
 Red=Cloning site Green=Tags(s)

MREQLKGHETQTTCDWHPKMTELYQSLADLNNVRF SAYRTAMKLRRLQKALCLDLLSL SAACDALDQHNL
 KQNDQPMIDILQIINCLTTIYDRLEQEHNNLVNVP LCVDMLNWLNNVYDTGRTGRIRVLSFKTGIISLCK
 AHLEDKYRYL FKQVASSTGFCDQRRLLGLLHDSIQIPRQLGEVASFGGSNIEPSVRSCFQFANNKPEIEA
 ALFLDWMRLEPQSMVWLPVLRVAAAETA KHQAKCNICKCEPIIGFRYRSLKHFNYDICQSCFFSGRVAK
 GHKMHPMVEYCTPTTSGEDVRDFAKVLKNKFR TKRYFAKHPRMGYLPVQTVLEGNMTPASSPQLSHD
 DTHSRIEHYASRLAEMENSNGSYLNDISPNESIDDEHLLIQHYCQSLNQDSPLSQPRSAQILISLESE
 ERGELERILADLEEENRNLQAEYDRLLKQHEHKGLSPLSPPEMMPTSPQSPRDAELIAEAKLLRQHKGR
 LEARMQILEDHKNQLESQHLRLRQLLEQPQAEAKVNGTTVSSPSTSLQRS DSSQPMLLRVVGSTSDSMG
 EEDLLSPPQDTSTGLEEVMEQLNNSFPSSRGHNVGSLFHMADDLGRAMESLVSVMTDEEGAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6707_g08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004018

ORF Size: 1866 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).

- 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_004018.3](#)

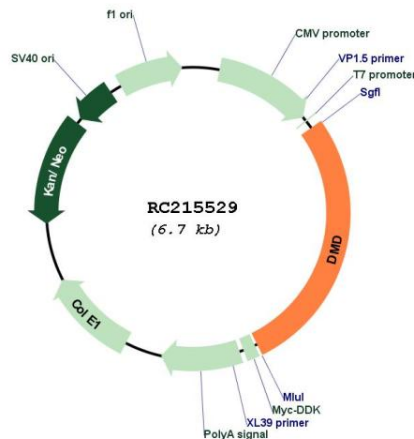
RefSeq Size: 4552 bp

RefSeq ORF: 1869 bp

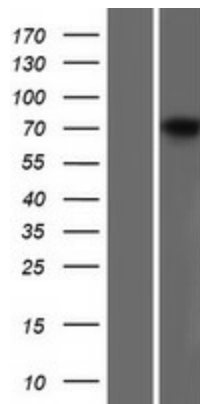
Locus ID: 1756

UniProt ID: [P11532](#)
Cytogenetics: Xp21.2-p21.1
Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), Viral myocarditis
MW: 70.6 kDa
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]

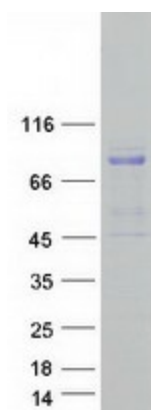
Product images:



Circular map for RC215529



Western blot validation of overexpression lysate (Cat# [LY418278]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215529 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DMD protein (Cat# [TP315529]). The protein was produced from HEK293T cells transfected with DMD cDNA clone (Cat# RC215529) using MegaTran 2.0 (Cat# [TT210002]).