

Product datasheet for **RC226447**

Dysferlin (DYSF) (NM_001130984) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dysferlin (DYSF) (NM_001130984) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DYSF
Synonyms:	FER1L1; LGMD2B; LGMDR2; MMD1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC226447 representing NM_001130984 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGTGCTGCCTGCTGGTGAGGGCCAGCAACCTCCCCAGTGCGAAGAAGGACCGGCGCAGCGACCCTG
TCGCAAGCCTGACTTTCCGAGGGGTGAAGAAGAGAACCAAGTCATCAAGAACAGCGTGAACCTGTATG
GAATGAGGGATTGAATGGGACCTCAAGGGCATCCCCCTGGACCAGGGCTCTGAGCTTCATGTGGTGGTC
AAAGACCATGAGACGATGGGGAGGAACAGGTTCCCTGGGGGAAGCCAAGGTCCCACTCCGAGAGGTCCCTCG
CCACCCCTAGTCTGTCCGCCAGTTC AATGCCCCCTGCTGGACACCAAGAAGCAGCCCCAGAGGGCCCTC
GCTGGTCTGCAGGTGTCTACACACCGCTGCCTGGAGCTGTGCCCTGTTCCCGCCCCCTACTCCTCTG
GAGCCCTCCCCGACTCTGCCTGACCTGGATGTAGTGGCAGACACAGGAGGAGAGGAAGACACAGAGGACC
AGGGACTCACTGGAGATGAGGCGGAGCCATTCTGGATCAAAGCGGAGGCCCGGGGGCTCCCACACCCC
AAGGAACTACCTTCACGTCTCCGCCCACTACCCCGGATCAAAGAAAGCGAAGTGCCTACATCT
AGAAAGCTGCTGTCAGACAAACCGCAGGATTTCCAGATCAGGGTCCAGGTGATCGAGGGGCGCCAGCTGC
CGGGGGTGAACATCAAGCCTGTGGTCAAGTTACCGCTGCAGGGCAGACCAAGCGGACCGGATCCACAA
GGGAAACAGCCCACTTTCAATGAGACTCTTTTCTTCAACTTGTGTTGACTCTCTGGGGAGCTGTTTGAT
GAGCCCATCTTTATCACGGTGGTAGACTCTCGTTCTCTCAGGACAGATGCTCTCCTCGGGGAGTCCGGA
TGGACGTGGGCACCATTTACAGAGAGCCCCGGCACGCCTATCTCAGGAAGTGGCTGCTCTCAGACCC
TGATGACTTCTCTGCTGGGGCCAGAGGCTACCTGAAAACAAGCCTTTGTGTGCTGGGGCCTGGGGACGAA
GCGCCTCTGGAGAGAAAAGACCCCTCTGAAGACAAGGAGGACATTGAAAGCAACCTGCTCCGGCCACAG
GCGTAGCCCTGCGAGGAGCCCACTTCTGCCTGAAGGTCTCCGGGCCGAGGACTTGCCGAGATGGACGA
TGCCGTGATGGACAACGTGAAACAGATCTTTGGCTTCGAGAGTAACAAGAAGAACTTGGTGGACCCCTTT
GTGGAGGTCAGCTTTCGGGGGAAAATGCTGTGCAGCAAGATCTTGAGAGAAGACGGCAACCCCTCAGTGG
ACCAGAACATCACTGCCTGCCATGTTCCCTCCATGTGCGAAAAAATGAGGATTTCGTATCATAGACTG
GGACCCGCTGACTCAAAATGACATCGTGCTACCACCTACCTGAGTATGTCGAAAATCTCTGCCCTGGA
GGAGAAATAGAAGTGGATGACTACCTGGGCTTCTCCCACTTTTGGCCCTGCTACATCAACCTCTATG



[View online »](#)

GCAGTCCCAGAGAGTTTCACAGGCTTCCCAGACCCCTACACAGAGCTCAACACAGGCAAGGGGAAGGTGT
 GGCTTATCGTGGCCGGCTTCTGCTCTCCCTGGAGACCAAGCTGGTGGAGCACAGTGAACAGAAGGTGGAG
 GACCTTCTGCGGATGACATCCTCCGGTGGAGAAGTACCTTAGGAGGCGCAAGTACTCCCTGTTTGC
 CCTTCTACTCAGCCACCATGCTGCAGGATGTGGATGATGCCATCCAGTTTGGAGTGCAGTACGGAACTA
 CGGGAACAAGTTCGACATGACCTGCCTGCCCTGGCTCCACCACTCAGTACAGCCGTGCAGTCTTTGAC
 GGGTGCCACTACTACTACCTACCCTGGGTAACTGTAAACCTGTGGTGGTGTGTATCCTACTGGGAGG
 ACATCAGCCATAGAATCGAGACTCAGAACCAGTGTCTGGGATTGCTGACCCGGTGAAGCTGCCCTGGA
 GCAGGTCACCTGGCCCTGAAGGCGCAGTGTCCACGGAGGACGTGGACTCGCTGGTGGCTCAGCTGACG
 GATGAGCTCATCGCAGGCTGCAGCCAGCCTCTGGGTGACATCCATGAGACACCCTCTGCCACCCACCTGG
 ACCAGTACCTGTACCAGCTGCGCACCCATCACCTGAGCCAAATCACTGAGGCTGCCCTGGCCCTGAAGCT
 CGGCCACAGTGGCTCCCTGCAGCTCTGGAGCAGGCGGAGGACTGGCTCCTGCGTCTGCGTGGCCCTGGCA
 GAGGAGCCCCAGAACAGCCTGCCGGACATCGTATCTGGATGCTGCAGGGAGACAAGCGTGTGGCATAACC
 AGCGGGTGCCCGCCACCAAGTCTTCTCCCGCGGGTGGCAACTACTGTGGCAAGAATTGTGGGAA
 GCTACAGACAATCTTTGAAATATCCGATGGAGAAGGTGCCTGGCGCCCGGATGCCAGTGCAGATACGG
 GTCAAGCTGTGGTTTGGGCTCTCAGTGGATGAGAAGGAGTTCAACCAGTTTGTGAGGGGAAGCTGTCTG
 TCTTTGCTGAAACCTATGAGAACGAGACTAAGTTGGCCCTTGTGGGAACGGGGACAACGGGCCCTCAC
 CTACCCCAAGTTTTCTGACGTCACGGGCAAGATCAAGCTACCCAAGGACAGCTTCCGCCCTCGGCCGGC
 TGGACCTGGGCTGGAGATTGGTTCGTGTGTCCGGAGAAGACTCTGCTCCATGACATGGACGCCGGTCAAC
 TGAGCTTCGTGGAAGAGGTGTTTGAAGACAGACCCGGCTTCCGGAGGCCAGTGGATCTACATGAGTGA
 CAACTACACCGATGTGAACGGGGAGAAGGTGCTTCCCAAGGATGACATTGAGTGGCCACTGGGCTGGAG
 TGGGAAGATGAGGAATGGTCCACAGACCTCAACCGGGTGTGATGAGCAAGGCTGGGAGTATAGCATCA
 CCATCCCCCGGAGCGGAAGCCGAAGCACTGGTCCCTGCTGAGAAGATGACTACACACCCGACGGCG
 CGCTGGTGGCTGCCAGGAGGACTCAGCCAAATGGAAGCACTGAAAAGGCACAGGACGGCGGAG
 GCGGAGGGCAGGGCTGGGAGTACGCCTCTTTTTGGCTGGAAGTTCCACCTCGATACCGCAAGACAG
 ATGCCTTCCGCCCGCCGCTGGCGCCGTGCGATGGAGCCACTGGAGAAGACGGGGCTGCAGTGTGTT
 TGCCCTTGAGGGGGCCCTGGCGGCGTGTGGATGACAAGAGTGAAGATCCATGTCCGTCTCCACCTTG
 AGCTTCGTTGTAACAGACCCACGATTTCTGCATATTCGACTATGGGAACCGTACCATCTACGCTGCT
 ACATGTACCAGGCCCGGACCTGGCTGCGATGGACAAGGACTTTTTTCTGATCCCTATGCCATCGTCTC
 CTTCTGCACCAGAGCCAGAAGACGGTGGTGGTGAAGAACCCTTAACCCACCTGGGACCAGACGCTC
 ATCTTCTACGAGATCGAGATCTTTGGCGAGCCGGCCACAGTTGCTGAGCAACCGCCAGCATTGTGGTGG
 AGCTGTACGACCATGACACTTATGGTGCAGACGAGTTTATGGGTGCTGCATCTGTCAACCGAGTCTGGA
 ACGGATGCCACGGCTGGCCCTGGTCCCCTGACGAGGGGCAAGCCAGCCGTGGGGGAGCTGCTGGCCCT
 TTTGAGCTCATCCAGAGAGAGAAGCCGGCCATCCACCATATTCCTGGTTTTGAGGTGCAGGAGACATCAA
 GGATCCTGGATGAGTCTGAGGACACAGACCTGCCCTACCCACCACCCAGAGGGAGGCCAACATCTACAT
 GGTTCCTCAGAACATCAAGCCAGCGCTCCAGCGTACCGCCATCGAGATCCTGGCATGGGGCTGCGGAAC
 ATGAAGAGTTACCAGCTGGCCAACATCTCTCCCCAGCCTCGTGGTAGAGTGTGGGGCCAGACGGTGC
 AGTCTGTGTATCAGGAACCTCCGGAAGAACCCCACTTTGACATCTGCACCCTTTTATGGAAGTGTAT
 GCTGCCAGGGAGGAGCTCTACTGCCCCCATACCGTCAAGGTATCGATAACCGCCAGTTTGGCCGC
 CGCCCTGTGGTGGCCAGTGTACCATCCGCTCCCTGGAGAGCTTCTGTGTGACCCTACTCGGCGGAGA
 GTCATCCCCACAGGGTGGCCAGACGATGTGAGCCTACTCAGTCTGGGGAAGACGTGCTCATCGACAT
 TGATGACAAGGAGCCCTCATCCCATCCAGTTCGACAGCGTCTGTGAGCTTGGCCCCACTAACACG
 GCTTCTCCTCCATCCAGTCTCATGAGGAAGAGTTCATCGATTGGTGGAGCAAATTTTTCCTCCATAG
 GGGAGAGGAAAAGTGGGCTCTACCTGGAGAAGGATTTTACACCCTGAAGGTCTATGACACACAGCT
 GGAGAATGTGGAGGCTTTGAGGCTGTCTGACTTTTGAACACCTTCAAGCTGTACGGGGCAAGACG
 CAGGAGGAGACAGAAGATCCATCTGTGATTGGTGAATTTAAGGGCCTCTTCAAAATTTATCCCTCCCAG
 AAGACCCAGCCATCCCCATGCCCAAGACAGTCCACCAGCTGGCCGCCAGGGACCCAGGAGTGTCT
 GGTCCGTATCTACATTGTCGAGCATTGGCTGCAGCCCAAGGACCCCAATGAAAAGTGTGATCCTTAC
 ATCAAGATCTCCATAGGGAAGAAATCAGTGAGTGACCAGGATAACTACATCCCCTGCACGCTGGAGCCCG
 TATTTGAAAAGATGTTCCAGCTGACCTGCACTCTGCCTCTGGAGAAGGACCTAAAGATCACTCTCTATGA
 CTATGACCTCCTCTCAAGGACGAAAAGATCGGTGAGACGGTCTGCGACCTGGAGAACAGGCTGCTGTCC
 AAGTTTGGGGCTCGCTGTGGACTCCCACAGACCTACTGTGTCTTGGACCGAACCAGTGGCGGGACACG
 TCCGCCCTCCCAGCTCCTCCACCTTCTGCCAGCAGCATAGAGTCAAGGCACCTGTGTACCGACAGA

CCGTGTAATGTTTCAGGATAAAGAATATTCCATTGAAGAGATAGAGGCTGGCAGGATCCCAAACCCACAC
CTGGGCCAGTGGAGGAGCGTCTGGCTCTGCATGTGCTTCAGCAGCAGGGCCTGGTCCCGGAGCACGTGG
AGTCACGGCCCCCTACAGCCCCCTGCAGCCAGACATCGAGCAGGGGAAGCTGCAGATGTGGGTCGACCT
ATTTCCGAAGGCCCTGGGGCGGCCTGGACCTCCCTTCAACATCACCCACGGAGAGCCAGAAGGTTTTTC
CTGCGTTGTATTATCTGGAATACCAGAGATGTGATCCTGGATGACCTGAGCCTCACGGGGGAGAAGATGA
GCGACATTTATGTGAAAGGTTGGATGATTGGCTTTGAAGAACAACAAGCAAAGACAGACGTGATTATCG
TTCCCTGGGAGGTGAAGCAACTCAACTGGAGGTTCAATTTCCCTTCGACTACCTGCCAGCTGAGCAA
GTCTGTACCATTGCCAAGAAGGATGCCTTCTGGAGGCTGGACAAGACTGAGAGCAAAATCCAGCACGAG
TGGTGTCCAGATCTGGGACAATGACAAGTTCTCCTTTGATGATTTTCTGGGCTCCCTGCAGCTCGATCT
CAACCGCATGCCAAGCCAGCCAAGACAGCCAAGAAGTGCTCCTTGGACCAGCTGGATGATGCTTTCCAC
CCAGAATGGTTTTGTCCCTTTTTGAGCAGAAAACAGTGAAGGGCTGGTGGCCCTGTGTAGCAGAAGAGG
GTGAGAAGAAAATACTGGCGGGCAAGCTGGAAATGACCTTGGAGATTGTAGCAGAGAGTGAGCATGAGGA
GCGGCCTGCTGGCCAGGGCCGGGATGAGCCCAACATGAACCCTAAGCTTGAGGACCCAAGGGCCCCGAC
ACCTCCTCCTGTGGTTTACCTCCCATACAAGACCATGAAGTTCATCCTGTGGCGGCTTCCGGTGGG
CCATCATCCTTTCATCATCCTTTCATCCTGCTGCTGTTCTGGCCATTTTCATCTACGCCTTCCCGAA
CTATGCTGCCATGAAGCTGGTGAAGCCCTTCAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

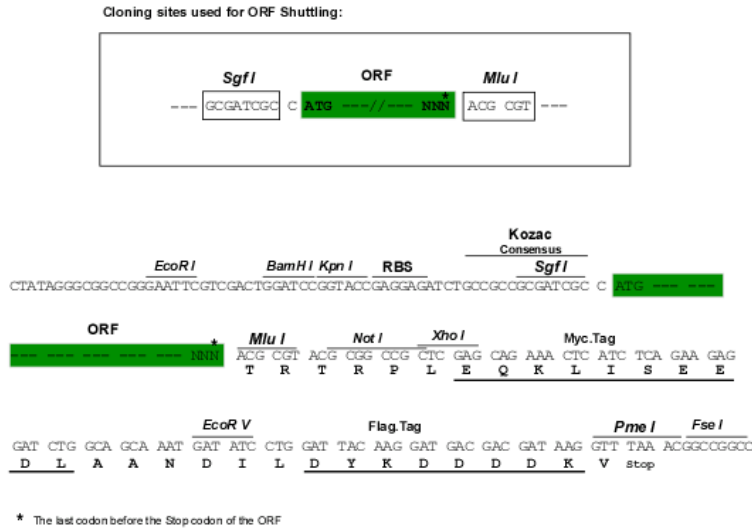
Protein Sequence: >RC226447 representing NM_001130984
 Red=Cloning site Green=Tags(s)

MLCCLLVASNLPSAKKDRRSDPVASL TFRGVKKRTKVIKNSVNPVWNEGFWDLKGIPLDQGSSELHVVV
 KDHETMGRNRFLGEAKVPLREVLATPSL SASFNAPLLDTKKQPTGASLVLQVSYTLPGLGAVPLFPPPTPL
 EPSPTLPDL DVVADTGG EEDTEDQGLTGDEAEPFLDQSGGPGAPTPRKLPSRPPPHYPGIKRKRSAPTS
 RKLLSDKPQDFQIRVQVIEGRQLPGVNIKPVVKVTAAGQTKRTRIHKGNSPLFNETLFFNLFDSPGELFD
 EPFITVVDSSRLRTDALLGEFRMDVGTIYREPRHAYLRKWL LLDSPDDFSAGARGYLKTSLCV LGGPDE
 APLERKDPSEDKEDIESNLLRPTGVALRGAHFCLKVFRAEDLPQMDDAVMDNVKQIFGFESNKKNLVDPF
 VEVSFAGKMLCSKILEKTANPQWNQNILPAMFPMCEKMRIRIIDWDRLTHNDIVATTYLSMSKISAPG
 GEIEVDDYL GFLPTFGPCYINLYGSPREFTGFPDPYTELNTGKGEGVAYRGRLLLSLETKLVEHSEQKVE
 DLPADDILRVEKYLRRRKYSLFAAFYSATMLQD VDDAIQFEVSI GNYGNKFDMTCLPLASTTQYSRAVFD
 GCHYYL PWGNV KPVVVLSSY WEDISHRIETQNQLLGIADRLEAGLEQVHLALKAQCSTEDVDSLVAQLT
 DELIAGCSQPLGDIHETPSATHLDQYL YQLRTHHL SQITEAALALKLGHSELPAALEQAEDWLLRLRALA
 EEPQNSLPD IIVIMLQGD KRVAYQRVPAHQVLF SRRGAN YCGKNCGLQTI FLKYPMEKVP GARMVPQIR
 VKLWFGLSVDEKEFNQFAEGKLSVFAET YENETKLALVGNWGTGLTYPKFS DVTGKIKL PKDSFRPSAG
 WTWAGDWFV CPEKTLLHDM DAGHLSFVEEVFENQTRLPGGQWIYMSDNYTDVNGEKVLPKDDIECPLGKW
 WEDEEWSTDLNRAVDEQWEYSITIPPERKPKHWVPAEKMYTHRRRRWVRLRRRDL SQMEALKRHRQAE
 AEGEGWEYASLFGWKFHLEYRKTDAFRRRRWRRRMEPLEKTGPAAVFALEGALGGVMDKSEDSMSVSTL
 SFGVNRPTISCI FDYGNRYHLRCYMYQARDLAAMDKDSFSDPYAIVSFLHQSQKT VVVKNTLNPTWDQTL
 IFYEIEIFGEPATVAEQPPSIVVELYDHDTYGADEFMGRICICQPSLERMPRLAWFPLTRGSQPSGELLAS
 FELIQREKPAIHHPGFVEVQETSRI LDESEDTLPYPPQREANIYMPQNIKPALQRTAIEILAWGLRN
 MKSYQLANISSPSLVVECGGQTVQSCVIRNLRKNPNFDICTLFMEVMLPREELYCPPI TVKVIDNRQFGR
 RPVVGQCTIRSL ESFLCDPYSAESPSPQGGPDDVSLSPGEDVLIDIDDK EPLIPIQLADGLSSLAPTNT
 ASPSSPHEE EFDWWSKFFASIGEREKCGSYLEKDFDTLKVYDTQLENVEAFEGLSDFCNTFKLYRGKT
 QEETEDPSVIGEFKGLFKIYPLPEDPAIPMPRQFHQLAAQGPQECLVRIYVRAFGLQPKDPNGKCDPY
 IKISIGKKSVDQDNYIPCTLEPVFGKMFELTCTLPLEKDLKITLYDYDLLSKDEKIGETVVDLENRLLS
 KFGARCGLPQTYCVSGPNQWRDQLRPSQLLHLFCQQHRVKAPVYRTDRVMFQDKEYSIEEIEAGRIPNPH
 LGPVEERLALHVLQQQLVPEHVESRPLYSPLQPDIEQGLQMWVDLFPKALGRPGPPFNITPRRARRFF
 LRCIIWNTRD VILDDLSTG EKMSDIYVKGWMI GFEEHKQKTDVHYRSLGGEGFNWRFIFPFDYLP AEQ
 VCTIAKKDAFWRLDKTESKIPARVVFQIWDNDKFSFDDFLGSLQLDLNRM PKPAKTAKKCSLDQLDDAFH
 PEWFVSLFEQKTVKGWPCVAEEGEEKILAGKLEMTLEIVA ESEHEERPAGQGRDEPNMNPKLEDPRRPD
 TSFLWFTSPYKTMKFI LWRRFRWAIILF IILFILLFLAIF IYAFPNYAAMKLVKPF S

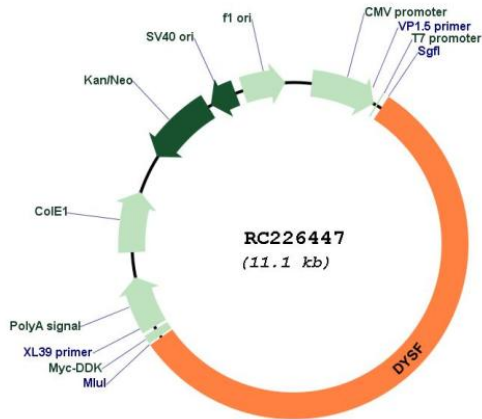
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001130984

ORF Size: 6264 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_001130984.2](#)

RefSeq ORF: 6267 bp

Locus ID: 8291

UniProt ID: [O75923](#)

Cytogenetics: 2p13.2

Protein Families: Transmembrane

MW: 237.8 kDa

Gene Summary: The protein encoded by this gene belongs to the ferlin family and is a skeletal muscle protein found associated with the sarcolemma. It is involved in muscle contraction and contains C2 domains that play a role in calcium-mediated membrane fusion events, suggesting that it may be involved in membrane regeneration and repair. In addition, the protein encoded by this gene binds caveolin-3, a skeletal muscle membrane protein which is important in the formation of caveolae. Specific mutations in this gene have been shown to cause autosomal recessive limb girdle muscular dystrophy type 2B (LGMD2B) as well as Miyoshi myopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2008]