OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG226454

Dysferlin (DYSF) (NM_001130982) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dysferlin (DYSF) (NM_001130982) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DYSF
Synonyms:	FER1L1; LGMD2B; LGMDR2; MMD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG226454 representing NM_001130982
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGTGCTGCCTGCTGGTGAGGGCCAGCAACCTCCCCAGTGCGAAGAAGGACCGGCGCAGCGACCCTG
TCGCAAGCCTGACTTTCCGAGGGGTGAAGAAGAGAACCAAAGTCATCAAGAACAGCGTGAACCCTGTATG
GAATGAGGGATTTGAATGGGACCTCAAGGGCATCCCCCTGGACCAGGGCTCTGAGCTTCATGTGGTGGTC
AAAGACCATGAGACGATGGGGAGGAACAGGTTCCTGGGGGAAGCCAAGGTCCCACTCCGAGAGGTCCTCG
CCACCCCTAGTCTGTCCGCCAGCTTCAATGCCCCCCTGCTGGACACCAAGAAGCAGCCCACAGGGGCCTC
GCTGGTCCTGCAGGTGTCCTACACACCGCTGCCTGGAGCTGTGCCCCTGTTCCCGCCCCCTACTCCTCTG
GAGCCCTCCCCGACTCTGCCTGACCTGGATGTAGTGGCAGGCGGGGGACAGAGCCGGGCCGAGACTTGGT
CCCTGCTCAGTGACAGCACCATGGACACGAGATACTCTGGAAAGAAGTGGCCGGCCCCCACGGACACAGG
AGGAGAGGAAGACACAGAGGACCAGGGACTCACTGGAGATGAGGCGGAGCCATTCCTGGATCAAAGCGGA
GGCCCGGGGGCTCCCACCACCCCAAGGAAACTACCTTCACGTCCTCCGCCCCACTACCCCGGGATCAAAA
GAAAGCGAAGTGCGCCTACATCTAGAAAGCTGCTGTCAGACAAACCGCAGGATTTCCAGATCAGGGTCCA
GGTGATCGAGGGGCGCCAGCTGCCGGGGGTGAACATCAAGCCTGTGGTCAAGGTTACCGCTGCAGGGCAG
ACCAAGCGGACGCGGATCCACAAGGGAAACAGCCCACTCTTCAATGAGACTCTTTTCTTCAACTTGTTTG
ACTCTCCTGGGGAGCTGTTTGATGAGCCCATCTTTATCACGGTGGTAGACTCTCGTTCTCTCAGGACAGA
TGCTCTCCTCGGGGAGTTCCGGATGGACGTGGGCACCATTTACAGAGAGCCCCGGCACGCCTATCTCAGG
AAGTGGCTGCTGCTCTCAGACCCTGATGACTTCTCTGCTGGGGCCAGAGGCTACCTGAAAACAAGCCTTT
GTGTGCTGGGGCCTGGGGACGAAGCGCCTCTGGAGAGAAAAGACCCCTCTGAAGACAAGGAGGACATTGA
AAGCAACCTGCTCCGGCCCACAGGCGTAGCCCTGCGAGGAGCCCACTTCTGCCTGAAGGTCTTCCGGGCC
GAGGACTTGCCGCAGATGGACGATGCCGTGATGGACAACGTGAAACAGATCTTTGGCTTCGAGAGTAACA
AGAAGAACTTGGTGGACCCCTTTGTGGAGGTCAGCTTTGCGGGGAAAATGCTGTGCAGCAAGATCTTGGA
GAAGACGGCCAACCCTCAGTGGAACCAGAACATCACACTGCCTGCCATGTTTCCCTCCATGTGCGAAAAA

View online »

ATGAGGATTCGTATCATAGACTGGGACCGCCTGACTCACAATGACATCGTGGCTACCACCTACCTGAGTA
TGTCGAAAATCTCTGCCCCTGGAGGAGAAATAGAAGAGGAGCCTGCAGGTGCTGTCAAGCCTTCGAAAGC
CTCAGACTTGGATGACTACCTGGGCTTCCTCCCCACTTTTGGGCCCTGCTACATCAACCTCTATGGCAGT
CCCAGAGAGTTCACAGGCTTCCCAGACCCCTACACAGAGCTCAACACAGGCAAGGGGGAAGGTGTGGCTT
ATCGTGGCCGGCTTCTGCTCTCCCTGGAGACCAAGCTGGTGGAGCACAGTGAACAGAAGGTGGAGGACCT
TCCTGCGGATGACATCCTCCGGGTGGAGAAGTACCTTAGGAGGCGCAAGTACTCCCTGTTTGCGGCCTTC
TACTCAGCCACCATGCTGCAGGATGTGGATGATGCCATCCAGTTTGAGGTCAGCATCGGGAACTACGGGA
ACAAGTTCGACATGACCTGCCTGCCGCTGGCCTCCACCACTCAGTACAGCCGTGCAGTCTTTGACGGGTG
CCACTACTACTACCTACCCTGGGGTAACGTGAAACCTGTGGTGGTGCTGTCATCCTACTGGGAGGACATC
AGCCATAGAATCGAGACTCAGAACCAGCTGCTTGGGATTGCTGACCGGCTGGAAGCTGGCCTGGAGCAGG
TCCACCTGGCCCTGAAGGCGCAGTGCTCCACGGAGGACGTGGACTCGCTGGTGGCTCAGCTGACGGATGA
GCTCATCGCAGGCTGCAGCCAGCCTCTGGGTGACATCCATGAGACACCCTCTGCCACCCACCTGGACCAG
TACCTGTACCAGCTGCGCACCCATCACCTGAGCCAAATCACTGAGGCTGCCCTGGCCCTGAAGCTCGGCC
ACAGTGAGCTCCCTGCAGCTCTGGAGCAGGCGGAGGACTGGCTCCTGCGTCTGCGTGCCCTGGCAGAGGA
GCCCCAGAACAGCCTGCCGGACATCGTCATCTGGATGCTGCAGGGAGACAAGCGTGTGGCATACCAGCGG
GTGCCCGCCCACCAAGTCCTCTTCTCCCGGCGGGGTGCCAACTACTGTGGCAAGAATTGTGGGAAGCTAC
AGACAATCTTTCTGAAATATCCGATGGAGAAGGTGCCTGGCGCCCGGATGCCAGTGCAGATACGGGTCAA
GCTGTGGTTTGGGCTCTCAGTGGATGAGAAGGAGTTCAACCAGTTTGCTGAGGGGAAGCTGTCTGTCTTT
GCTGAAACCTATGAGAACGAGACTAAGTTGGCCCTTGTTGGGAACTGGGGCACAACGGGCCTCACCTACC
CCAAGTTTTCTGACGTCACGGGCAAGATCAAGCTACCCAAGGACAGCTTCCGCCCCTCGGCCGGCTGGAC
CTGGGCTGGAGATTGGTTCGTGTGTCCGGAGAAGACTCTGCTCCATGACATGGACGCCGGTCACCTGAGC
TTCGTGGAAGAGGTGTTTGAGAACCAGACCCGGCTTCCCGGAGGCCAGTGGATCTACATGAGTGACAACT
ACACCGATGTGAACGGGGAGAAGGTGCTTCCCAAGGATGACATTGAGTGCCCACTGGGCTGGAAGTGGGA
AGATGAGGAATGGTCCACAGACCTCAACCGGGCTGTCGATGAGCAAGGCTGGGAGTATAGCATCACCATC
CCCCCGGAGCGGAAGCCGAAGCACTGGGTCCCTGCTGAGAAGATGTACTACACACACCGACGGCGGCGCT
GGGTGCGCCTGCGCAGGAGGGATCTCAGCCAAATGGAAGCACTGAAAAGGCACAGGCAGGCGGAGGCGGA
GGGCGAGGGCTGGGAGTACGCCTCTCTTTTTGGCTGGAAGTTCCACCTCGAGTACCGCAAGACAGATGCC
TTCCGCCGCCGCCGCTGGCGCCGTCGCATGGAGCCACTGGAGAAGACGGGGCCTGCAGCTGTGTTTGCCC
TTGAGGGGGCCCTGGGCGGCGTGATGGATGACAAGAGTGAAGATTCCATGTCCGTCTCCACCTTGAGCTT
CGGTGTGAACAGACCCACGATTTCCTGCATATTCGACTATGGGAACCGCTACCATCTACGCTGCTACATG
TACCAGGCCCGGGACCTGGCTGCGATGGACAAGGACTCTTTTTCTGATCCCTATGCCATCGTCTCCTTCC
TGCACCAGAGCCAGAAGACGGTGGTGGTGAAGAACACCCTTAACCCCACCTGGGACCAGACGCTCATCTT
CTACGAGATCGAGATCTTTGGCGAGCCGGCCACAGTTGCTGAGCAACCGCCCAGCATTGTGGTGGAGCTG
TACGACCATGACACTTATGGTGCAGACGAGTTTATGGGTCGCTGCATCTGTCAACCGAGTCTGGAACGGA
TGCCACGGCTGGCCTGGTTCCCACTGACGAGGGGCAGCCAGCCGTCGGGGGAGCTGCTGGCCTCTTTTGA
GCTCATCCAGAGAGAGAAGCCGGCCATCCACCATATTCCTGGTTTTGAGGTGCAGGAGACATCAAGGATC
CTGGATGAGTCTGAGGACACAGACCTGCCCTACCCACCACCCCAGAGGGAGGCCAACATCTACATGGTTC
CTCAGAACATCAAGCCAGCGCTCCAGCGTACCGCCATCGAGATCCTGGCATGGGGCCTGCGGAACATGAA
GAGTTACCAGCTGGCCAACATCTCCTCCCCCAGCCTCGTGGTAGAGTGTGGGGGCCAGACGGTGCAGTCC
TGTGTCATCAGGAACCTCCGGAAGAACCCCAACTTTGACATCTGCACCCTCTTCATGGAAGTGATGCTGC
CCAGGGAGGAGCTCTACTGCCCCCCCATCACCGTCAAGGTCATCGATAACCGCCAGTTTGGCCGCCGGCC
TGTGGTGGGCCAGTGTACCATCCGCTCCCTGGAGAGCTTCCTGTGTGACCCCTACTCGGCGGAGAGTCCA
TCCCCACAGGGTGGCCCAGACGATGTGAGCCTACTCAGTCCTGGGGAAGACGTGCTCATCGACATTGATG
ACAAGGAGCCCCTCATCCCCATCCAGGAGGAAGAGTTCATCGATTGGTGGAGCAAATTCTTTGCCTCCAT
AGGGGAGAGGGAAAAGTGCGGCTCCTACCTGGAGAAGGATTTTGACACCCTGAAGGTCTATGACACACAG
CTGGAGAATGTGGAGGCCTTTGAGGGCCTGTCTGACTTTTGTAACACCTTCAAGCTGTACCGGGGCAAGA
CGCAGGAGGAGACAGAAGATCCATCTGTGATTGGTGAATTTAAGGGCCTCTTCAAAATTTATCCCCTCCC
AGAAGACCCAGCCATCCCCATGCCCCCAAGACAGTTCCACCAGCTGGCCGCCCAGGGACCCCAGGAGTGC
TTGGTCCGTATCTACATTGTCCGAGCATTTGGCCTGCAGCCCAAGGACCCCAATGGAAAGTGTGATCCTT
ACATCAAGATCTCCATAGGGAAGAAATCAGTGAGTGACCAGGATAACTACATCCCCTGCACGCTGGAGCC
CGTATTTGGAAAGATGTTCGAGCTGACCTGCACTCTGCCTCTGGAGAAGGACCTAAAGATCACTCTCTAT
GACTATGACCTCCTCTCCAAGGACGAAAAGATCGGTGAGACGGTCGTCGACCTGGAGAACAGGCTGCTGT

CCAAGTTTGGGGCTCGCTGTGGACTCCCACAGACCTACTGTGTCTCTGGACCGAACCAGTGGCGGGACCA
GCTCCGCCCCTCCCAGCTCCTCCACCTCTTCTGCCAGCAGCATAGAGTCAAGGCACCTGTGTACCGGACA
GACCGTGTAATGTTTCAGGATAAAGAATATTCCATTGAAGAGATAGAGGCTGGCAGGATCCCAAACCCAC
ACCTGGGCCCAGTGGAGGAGCGTCTGGCTCTGCATGTGCTTCAGCAGCAGGGCCTGGTCCCGGAGCACGT
GGAGTCACGGCCCCTCTACAGCCCCCTGCAGCCAGACATCGAGCAGGGGAAGCTGCAGATGTGGGTCGAC
CTATTTCCGAAGGCCCTGGGGCGGCCTGGACCTCCCTTCAACATCACCCCACGGAGAGCCAGAAGGTTTT
TCCTGCGTTGTATTATCTGGAATACCAGAGATGTGATCCTGGATGACCTGAGCCTCACGGGGGAGAAGAT
GAGCGACATTTATGTGAAAGGTTGGATGATTGGCTTTGAAGAACACAAGCAAAAGACAGACGTGCATTAT
CGTTCCCTGGGAGGTGAAGGCAACTTCAACTGGAGGTTCATTTTCCCCTTCGACTACCTGCCAGCTGAGC
AAGTCTGTACCATTGCCAAGAAGGATGCCTTCTGGAGGCTGGACAAGACTGAGAGCAAAATCCCAGCACG
AGTGGTGTTCCAGATCTGGGACAATGACAAGTTCTCCTTTGATGATTTTCTGGGCTCCCTGCAGCTCGAT
CTCAACCGCATGCCCAAGCCAGCCAAGACAGCCAAGAAGTGCTCCTTGGACCAGCTGGATGATGCTTTCC
ACCCAGAATGGTTTGTGTCCCTTTTTGAGCAGAAAACAGTGAAGGGCTGGTGGCCCTGTGTAGCAGAAGA
GGGTGAGAAGAAAATACTGGCGGGCAAGCTGGAAATGACCTTGGAGATTGTAGCAGAGAGTGAGCATGAG
GAGCGGCCTGCTGGCCAGGGCCGGGATGAGCCCAACATGAACCCTAAGCTTGAGGACCCAAGGCGCCCCG
ACACCTCCTTCCTGTGGTTTACCTCCCCATACAAGACCATGAAGTTCATCCTGTGGCGGCGTTTCCGGTG
GGCCATCATCCTCTTCATCATCCTCTTCATCCTGCTGCTGTTCCTGGCCATCTTCATCTACGCCTTCCCG
AACTATGCTGCCATGAAGCTGGTGAAGCCCTTCAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

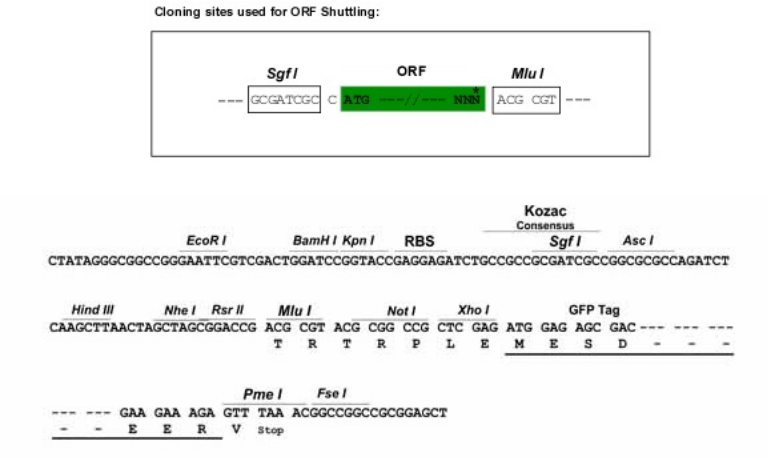
>RG226454 representing NM_001130982
Red=Cloning site Green=Tags(s)

MLCCLLVRASNLPSAKKDRRSDPVASLTFRGVKKRTKVIKNSVNPVWNEGFEWDLKGIPLDQGSELHVVV
KDHETMGRNRFLGEAKVPLREVLATPSLSASFNAPLLDTKKQPTGASLVLQVSYTPLPGAVPLFPPPTPL
EPSPTLPDLDVVAGGGQSRAETWSLLSDSTMDTRYSGKKWPAPTDTGGEEDTEDQGLTGDEAEPFLDQSG
GPGAPTTPRKLPSRPPPHYPGIKRKRSAPTSRKLLSDKPQDFQIRVQVIEGRQLPGVNIKPVVKVTAAGQ
TKRTRIHKGNSPLFNETLFFNLFDSPGELFDEPIFITVVDSRSLRTDALLGEFRMDVGTIYREPRHAYLR
KWLLLSDPDDFSAGARGYLKTSLCVLGPGDEAPLERKDPSEDKEDIESNLLRPTGVALRGAHFCLKVFRA
EDLPQMDDAVMDNVKQIFGFESNKKNLVDPFVEVSFAGKMLCSKILEKTANPQWNQNITLPAMFPSMCEK
MRIRIIDWDRLTHNDIVATTYLSMSKISAPGGEIEEEPAGAVKPSKASDLDDYLGFLPTFGPCYINLYGS
PREFTGFPDPYTELNTGKGEGVAYRGRLLLSLETKLVEHSEQKVEDLPADDILRVEKYLRRRKYSLFAAF
YSATMLQDVDDAIQFEVSIGNYGNKFDMTCLPLASTTQYSRAVFDGCHYYYLPWGNVKPVVVLSSYWEDI
SHRIETQNQLLGIADRLEAGLEQVHLALKAQCSTEDVDSLVAQLTDELIAGCSQPLGDIHETPSATHLDQ
YLYQLRTHHLSQITEAALALKLGHSELPAALEQAEDWLLRLRALAEEPQNSLPDIVIWMLQGDKRVAYQR
VPAHQVLFSRRGANYCGKNCGKLQTIFLKYPMEKVPGARMPVQIRVKLWFGLSVDEKEFNQFAEGKLSVF
AETYENETKLALVGNWGTTGLTYPKFSDVTGKIKLPKDSFRPSAGWTWAGDWFVCPEKTLLHDMDAGHLS
FVEEVFENQTRLPGGQWIYMSDNYTDVNGEKVLPKDDIECPLGWKWEDEEWSTDLNRAVDEQGWEYSITI
PPERKPKHWVPAEKMYYTHRRRRWVRLRRRDLSQMEALKRHRQAEAEGEGWEYASLFGWKFHLEYRKTDA
FRRRRWRRRMEPLEKTGPAAVFALEGALGGVMDDKSEDSMSVSTLSFGVNRPTISCIFDYGNRYHLRCYM
YQARDLAAMDKDSFSDPYAIVSFLHQSQKTVVVKNTLNPTWDQTLIFYEIEIFGEPATVAEQPPSIVVEL
YDHDTYGADEFMGRCICQPSLERMPRLAWFPLTRGSQPSGELLASFELIQREKPAIHHIPGFEVQETSRI
LDESEDTDLPYPPPQREANIYMVPQNIKPALQRTAIEILAWGLRNMKSYQLANISSPSLVVECGGQTVQS
CVIRNLRKNPNFDICTLFMEVMLPREELYCPPITVKVIDNRQFGRRPVVGQCTIRSLESFLCDPYSAESP
SPQGGPDDVSLLSPGEDVLIDIDDKEPLIPIQEEEFIDWWSKFFASIGEREKCGSYLEKDFDTLKVYDTQ
LENVEAFEGLSDFCNTFKLYRGKTQEETEDPSVIGEFKGLFKIYPLPEDPAIPMPPRQFHQLAAQGPQEC
LVRIYIVRAFGLQPKDPNGKCDPYIKISIGKKSVSDQDNYIPCTLEPVFGKMFELTCTLPLEKDLKITLY
DYDLLSKDEKIGETVVDLENRLLSKFGARCGLPQTYCVSGPNQWRDQLRPSQLLHLFCQQHRVKAPVYRT
DRVMFQDKEYSIEEIEAGRIPNPHLGPVEERLALHVLQQQGLVPEHVESRPLYSPLQPDIEQGKLQMWVD
LFPKALGRPGPPFNITPRRARRFFLRCIIWNTRDVILDDLSLTGEKMSDIYVKGWMIGFEEHKQKTDVHY
RSLGGEGNFNWRFIFPFDYLPAEQVCTIAKKDAFWRLDKTESKIPARVVFQIWDNDKFSFDDFLGSLQLD
LNRMPKPAKTAKKCSLDQLDDAFHPEWFVSLFEQKTVKGWWPCVAEEGEKKILAGKLEMTLEIVAESEHE
ERPAGQGRDEPNMNPKLEDPRRPDTSFLWFTSPYKTMKFILWRRFRWAIILFIILFILLLFLAIFIYAFP
NYAAMKLVKPFS

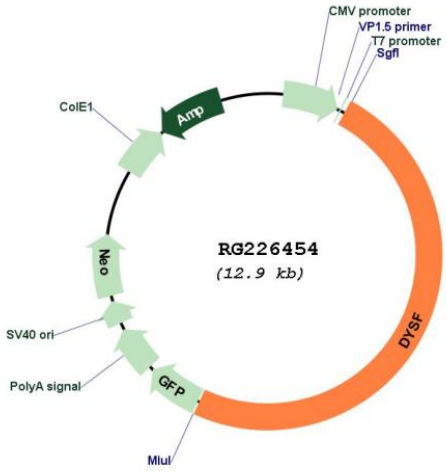
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001130982
ORF Size:	6336 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_001130982.2
RefSeq Size:	6775 bp
RefSeq ORF:	6339 bp
Locus ID:	8291
UniProt ID:	O75923
Cytogenetics:	2p13.2
Protein Families:	Transmembrane
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]