

Product datasheet for **RG226455**

Dysferlin (DYSF) (NM_001130981) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dysferlin (DYSF) (NM_001130981) 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:	>RG226455 representing NM_001130981 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGAGGGTCTTCATCCTCTATGCCGAGAACGTCCACACACCCGACACCGACATCAGCGATGCCTACT
GCTCCGCGGTGTTTGCAGGGGTGAAGAAGAGAACCAAAGTCATCAAGAACAGCGTGAACCCTGTATGGAA
TGAGGGATTTGAATGGGACCTCAAGGGCATCCCCCTGGACCAGGGCTCTGAGCTTCATGTGGTGGTCAA
GACCATGAGACGATGGGAGGAACAGGTTCTGGGGGAAGCCAAGTCCCCTCCGAGAGGTCCTCGCCA
CCCCTAGTCTGTCCGCCAGCTTCAATGCCCCCTGCTGGACACCAAGAAGCAGCCACAGGGCCCTCGCT
GGTCTGCAGGTGCTACACACCGCTGCCTGGAGCTGTGCCCTGTCCCGCCCCCTACTCCTCTGGAG
CCCTCCCCGACTCTGCCTGACCTGGATGTAGTGGCAGGCGGGGGACAGAGCCGGGCCGAGACTTGGTCCC
TGCTCAGTGACAGCACCATGGACACGAGATACTCTGAAAAGAAGTGGCCGGCCCCACGGACACAGGAGG
AGAGGAAGACACAGAGGACCAGGGACTCACTGGAGATGAGGCGGAGCCATTCTGGATCAAAGCGGAGGC
CCGGGGCTCCCACCACCCCAAGGAACTACCTTACGTCTCCGCCCACTACCCGGGATCAAAGAA
AGCGAAGTGCGCCTACATCTAGAAAGCTGCTGTGACACAAACCGCAGGATTTCCAGATCAGGGTCCAGGT
GATCGAGGGCGCCAGCTGCCGGGGTGAACATCAAGCCTGTGGTCAAGGTTACCCTGCAGGGCAGACC
AAGCGGACGCGGATCCACAAGGAAACAGCCACTCTTCAATGAGACTCTTTTCAACTGTTTGGACT
CTCCTGGGAGCTGTTTGTAGCCCATCTTTATCACGGTGGTAGACTCTCGTTCTCAGGACAGATGC
TCTCCTCGGGAGTTCGGATGGACGTGGGCACCATTTACAGAGAGCCCCGGCACGCCTATCTCAGGAAG
TGGCTGCTGCTCTCAGACCCTGATGACTTCTGCTGGGGCCAGAGGCTACCTGAAAACAAGCCTTTGTG
TGCTGGGGCTGGGACGAAGCGCCTCTGGAGAGAAAAGACCCCTCTGAAGACAAGGAGGACATTGAAAG
CAACTGCTCCGGCCACAGGCGTAGCCCTGCGAGGAGCCACTTCTGCCTGAAGGTTCCGGGCCGAG
GACTTGCCGACAGTGGACGATGCCGTGATGGACAACGTGAAACAGATCTTTGGCTTCGAGAGTAACAAGA
AGAACTTGGTGGACCCCTTTGTGGAGGTGACGTTTGGGGGAAAATGCTGTGCAGCAAGATCTTGGAGAA
GACGGCAACCCCTCAGTGAACCAAGACATCACACTGCCTGCCATGTTTCCCTCCATGTGGAAAAAATG



AGGATTCGTATCATAGACTGGGACCGCCTGACTACAATGACATCGTGGCTACCACCTACCTGAGTATGT
 CGAAAACTCTGCCCTGGAGGAGAAATAGAAGTGGATGACTACCTGGGTTCTCTCCCACTTTTGGGCC
 CTGCTACATCAACCTCTATGGCAGTCCCAGAGAGTTTACAGGCTTCCCAGACCCCTACACAGAGCTCAAC
 ACAGGCAAGGGGAAGGTGTGGCTTATCGTGGCCGGCTTCTGCTCTCCCTGGAGACCAAGCTGGTGGAGC
 ACAGTGAACAGAAGGTGGAGGACCTTCTGCGGATGACATCCTCCGGGTGGAGAAGTACCTTAGGAGGCG
 CAAGTACTCCCTGTTTGGCCCTTCTACTCAGCCACCATGCTGCAGGATGTGGATGATGCCATCCAGTTT
 GAGGTACGCATCGGGAACACGGAACAAGTTTCGACATGACCTGCCTGCCCTGCCCTCCACCACTCAGT
 ACAGCCGTGCAGTCTTTGACGGGTGCCACTACTACTACCTACCCTGGGGTAACTGAAACCTGTGGTGGT
 GCTGTCTACTGTTGGGAGACATCAGCCATAGAATCGAGACTCAGAACCAGCTGCTTGGGATTGCTGAC
 CGGCTGGAAGCTGGCCTGGAGCAGGTCCACCTGGCCCTGAAGGCGCAGTCTCCACGGAGGACGTGGACT
 CGTGGTGGCTCAGTGCAGGATGAGCTCATCGCAGGCTGCAGCCAGCCTCTGGGTGACATCCATGAGAC
 ACCCTCTGCCACCACCTGGACCAGTACCTGTACCAGTGCACCCATCACCTGAGCCAAATCACTGAG
 GCTGCCCTGGCCCTGAAGCTCGGCCACAGTGAAGTCCCTGCAGCTCTGGAGCAGGCGGAGGACTGGCTCC
 TGGCTCTGCGTGGCCTGGCAGAGGAGCCCCAGAACAGCCTGCCGGACATCGTCTGATGCTGCAGGG
 AGACAAGCGTGTGGCATACCAGCGGGTGCCGCCACCAAGTCTTCTCCCGGGGGGTGCCAACTAC
 TGTGGCAAGAATTGTGGGAAGCTACAGACAATCTTTCTGAAATATCCGATGGAGAAGGTGCTGGCGCCC
 GGATGCCAGTGCAGATACGGGTCAAGCTGTGGTTTGGGCTCTCAGTGGATGAGAAGGAGTTCAACCAGTT
 TGCTGAGGGGAAGCTGTCTGTCTTTGCTGAAACCTATGAGAACGAGACTAAGTTGGCCCTTGTGGGAAC
 TGGGGCACAACGGGCCTCACCTACCCCAAGTTTCTGACGTACGGGCAAGTCAAGTACCCAAGGACA
 GCTTCCGCCCCCTCGGCCGGCTGGACCTGGGCTGGAGATTGGTTTGTGTGTCCGGAGAAGACTCTGCTCCA
 TGACATGGACGCCGCTCACCTGAGCTTCGTGGAAGAGGTGTTGAGAACCAGACCCGGCTTCCCGGAGGC
 CAGTGGATCTACATGAGTGACAACCTACCCGATGTGAACGGGGAGAAGGTGCTTCCCAAGGATGACATTG
 AGTCCCACTGGGCTGGAAGTGGGAAGATGAGGAATGGTCCACAGACCTCAACCGGGCTGTGATGAGCA
 AGGCTGGGAGTATAGCATCACCATCCCCCGGAGCGGAAGCCGAAGCACTGGGTCCCTGCTGAGAAGATG
 TACTACACACACCGAGCGGCGGCTGGGTGCGCCTGCGCAGGAGGGATCTCAGCCAAATGGAAGCACTGA
 AAAGGCACAGGCAGGCGGAGGCGGAGGGCTGGGAGTACGCTCTCTTTTTGGTGGAAAGTTCCA
 CCTCGAGTACCGCAAGACAGATGCCTTCCGCGCCGCGCTGGCGCCGTCGCATGGAGCCACTGGAGAAG
 ACGGGGCTGCAGCTGTGTTGCCCTTGAAGGGGCGCTGGGCGGCGTGTGGATGACAAGAGTGAAGATT
 CCATGTCCGTCTCCACCTTGAAGCTTCGGTGTGAACAGACCCACGATTTCTGCATATTCGACTATGGAA
 CCGCTACCATCTACGCTGCTACATGTACCAGGCCGGGACCTGGTGGATGGACAAGGACTCTTTTTCT
 GATCCCTATGCCATCGTCTCCTTCTGCACCAGAGCCAGAAGACGGTGGTGGTGAAGAACCCTTAACC
 CCACCTGGGACCAGACGCTCATCTTCTACGAGATCGAGATCTTTGGCGAGCCGGCCACAGTTGCTGAGCA
 ACCGCCACGATTGTGGTGGAGCTGTACGACCATGACACTTATGGTGCAGACGAGTTTATGGGTCGCTGC
 ATCTGTCAACCGAGTCTGGAACGGATGCCACGGCTGGCCTGGTCCCCTGACGAGGGGACAGCCAGCCGT
 CGGGGGAGCTGCTGGCCTCTTTTGAAGCTCATCCAGAGAGAGAAGCCGGCCATCCACCATATTCCTGGTTT
 TGAGGTGCAGGAGACATCAAGGATCCTGGATGAGTCTGAGGACACAGACCTGCCCTACCCACCACCCAG
 AGGGAGGCCAACATCTACATGGTTCTCAGAACATCAAGCCAGCGCTCCAGCGTACCGCCATCGAGATCC
 TGGCATGGGGCCTGCGGAACATGAAGAGTTACCAGCTGGCCAACATCTCTCCCCAGCCTCGTGGTAGA
 GTGTGGGGCCAGACGGTGCAGTCTGTGTCATCAGAACCTCCGGAAGAACCCTTGGATGACATCTGC
 ACCCTCTCATGGAAGTGTGCTGCCAGGGAGGAGCTTACTGCCCCCATCACCGTCAAGGTATCG
 ATAACCGCAGTTTGGCCGCGGCTGTGGTGGGCCAGTGTACCATCCGCTCCCTGGAGAGCTTCTGTG
 TGACCCCTACTCGGCGGAGAGTCCATCCCCACAGGGTGGCCAGACGATGTGAGCCTACTCAGTCTGGG
 GAAGAGCTGCTCATCGACATTGATGACAAGGAGCCCTCATCCCCATCCAGCTTGCAGACGGTCTGTGGA
 GCTTGGCCCCACTAACACGGCTTCTCTCCATCCAGTCTCATGAGGAAGAGTTTCATCGATTGGTGGAG
 CAAATTTTGCCTCCATAGGGGAGAGGGAAAAGTGGGCTCTACCTGGAGAAGGATTTTACACCCTG
 AAGGTCTATGACACACAGCTGGAGAATGTGGAGGCTTTGAGGGCTGTCTGACTTTTGAACACCTTCA
 AGCTGTACCGGGCAAGACGAGGAGAGACAGAAGATCCATCTGTGATTGGTGAATTTAAGGGCCTCTT
 CAAAATTTATCCCTCCCAGAAGACCCAGCCATCCCATGCCCCAAGACAGTTCACCAGCTGGCCGCC
 CAGGGACCCAGGAGTGTGGTCCGATCTACATTGTCCGAGCATTGGCTGCAGCCCAAGGACCCCA
 ATGGAAAGTGTGATCCTTACATCAAGATCTCCATAGGGAAGAAATCAGTGAAGTGAAGGACCAACTACAT
 CCCCTGCACGCTGGAGCCGTAATTTGAAAAGATGTTTCGAGCTGACCTGCACTCTGCCTCTGGAGAAGGAC
 CTAAGATCACTCTATGACTATGACCTCTCCAAGGACGAAAAGATCGGTGAGACGGTCTGTCGACC

TGGAGAACAGGCTGCTGTCCAAGTTTGGGGCTCGCTGTGGACTCCCACAGACCTACTGTGTCTCTGGACC
GAACCAGTGGCGGGACCAGCTCCGCCCTCCCAGCTCCTCCACCTCTTCTGCCAGCAGCATAGAGTCAAG
GCACCTGTGTACCGGACAGACCGTGTAAATGTTTCAGGATAAAGAATATCCATTGAAGAGATAGAGGCTG
GCAGGATCCCAAACCCACACCTGGGCCAGTGGAGGAGCGTCTGGCTCTGCATGTGCTTCAGCAGCAGGG
CCTGGTCCCGGAGCAGTGGAGTACGGCCCTCTACAGCCCTGCAGCCAGACATCGAGCAGGGGAAG
CTGCAGATGTGGTTCGACCTATTTCCGAAGGCCCTGGGGCGCCTGGACCTCCCTCAACATCACCCAC
GGAGAGCCAGAAGTTTTTCTGCGTTGTATTATCTGGAATACCAGAGATGTGATCCTGGATGACCTGAG
CCTCACGGGGGAGAAGATGAGCGACATTTATGTGAAAGTTGGATGATTGGCTTTGAAGAACACAAGCAA
AAGACAGACGTGCATTATCGTTCCTGGGAGGTGAAGGCAACTTCAACTGGAGGTTCAATTTCCCTTCG
ACTACCTGCCAGCTGAGCAAGTCTGTACCATTGCCAAGAAGGATGCCTTCTGGAGGCTGGACAAGACTGA
GAGCAAAATCCCAGCAGAGTGGTGTTCAGATCTGGACAATGACAAGTTCTCCTTTGATGATTTTCTG
GGCTCCCTGCAGCTCGATCTCAACCGCATGCCAAGCCAGCCAAGACAGCCAAGAAGTGCCTTGGACC
AGCTGGATGATGCTTTCCACCCAGAATGGTTTGTGTCCCTTTTTGAGCAGAAAACAGTGAAGGGCTGGT
GCCCTGTGTAGCAGAAGAGGGTGAGAAGAAAATACTGGCGGGCAAGCTGGAATGACCTTGGAGATTGTA
GCAGAGAGTGAGCATGAGGAGCGCCTGCTGGCCAGGGCCGGATGAGCCAACATGAACCTAAGCTTG
AGGACCCAAGGCCCCCGACACCTCCTTCTGTGGTTTACCTCCCATACAAGACCATGAAGTTTCATCCT
GTGGCGCGTTTTCCGGTGGGCCATCATCTTTCATCATCCTTTCATCCTGTGCTGTTCTGGCCATC
TTCATCTACGCCTTCCGAACATGCTGCCATGAAGCTGGTGAAGCCCTTCAGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAA

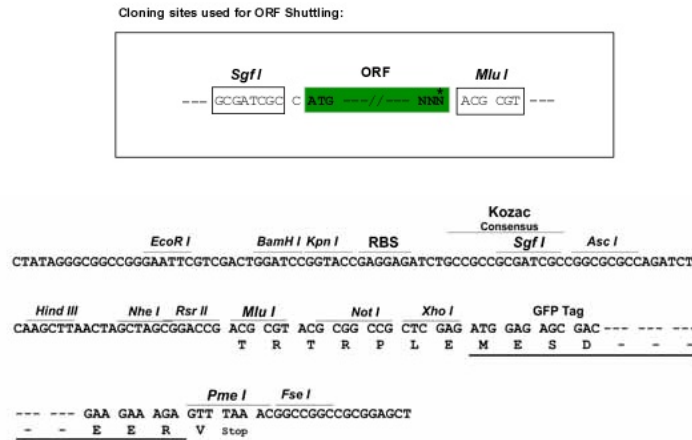
Protein Sequence: >RG226455 representing NM_001130981
 Red=Cloning site Green=Tags(s)

MLRVFILYAENVHTPDTDISDAYCSAVFAGVKKRTRKVIKNSVNPVWNEGFWDLKGIPLDQGSSELHVVVK
 DHETMGRNRFLEAKVPLREVLATPSLSASFNAPLLDTKKQPTGASLVLQVSYTLPAGAVPLFPPPTPLE
 PSPTLPDLDDVAGGGQSRRAETWSLLSDSTMDTRYSGKKWPAPTDGGEEDTEDQGLTGDEAEFLDQSGG
 PGAPTTPRKLPSPPPHYPGIKRKRSAPTSRLKLLSDKPQDFQIRVQVIEGRQLPGVNIKPVVKVTAAGQT
 KRTRIHKGNLSPFNFTLFFNLFDSGELFDEPIFITVVDSSRLRTDALLGEFRMDVGTIYREPRHAYLRK
 WLLLSDPDDFSAGARGYLKTSCLVLPDGPDEAPLERKDPSEDKEDIESNLLRPTGVALRGAHFCLKVFRAE
 DLPQMDDAVMDNVKQIFGFESNKKNLVDPFVEVSFAGKMLCSKILEKTANPQWNQNILPAMFSPMCEKM
 RIRIIDWDRLTHNDIVATTYLSMSKISAPGGEIEVDDYLGFLPTFGPCYINLYGSPREFTGFPDPTTELN
 TGKGEVAYRGRLLL SLETKLVEHSEQVEDLPADDILRVEKYLRRRKYSLFAAFYSATMLQDVDDAIQF
 EVSIGNYGNKFDMTCLPLASTTQYSRAVFDGCHYYLPLWGNVQVVLSSYWEDISHRIETQNLGLIAD
 RLEAGLEQVHLALKAQCSTEDVDSLVAQLTDEL IAGCSQPLGDIHETPSATHLDQYLYQLRTHHLSQITE
 AALAKLGHSELPAALEQAEDWLLRLRALAEEPQNSLPDIIWMLQGDKRVAQYRPAHQVLF SRRGANY
 CGKNCGLQTIIFLKYPMKVPGARMPVQIRVKLWFGLSVDEKEFNQFAEGKLSVFAETYENETKLALVGN
 WGTTLTYPKFSVDTGKIKLPKDSFRPSAGWTWAGDWFVCEKTLHMDAGHLSFVEEVFENQTRLPGG
 QWIYMSDNYTDVNGEKVLPKDDIECPLGWKWEDEEWSTDLNRAVDEQGWESITIPPERKPKHWVPAEKM
 YYTHRRRRWVRLRRRDL SQMEALKRHRQAEAEGEGWEYASLFGWKFHLEYRKTDAFRRRRRRRRMEPLEK
 TGPAAVFALEGALGGVMDKSEDSMSVSTLSFGVNRPTISCFIDYGNRYHLRCYMYQARDLAAMDKDSFS
 DPYAIVSFLHQSKTVVVKNTLNPTWDQTLIFYEIEIFGEPATVAEQPPSIVVELYDHDYGADEFMGRG
 ICQPSLERMPRLAWFPL TRGSQPSGELLASFELIQREKPAIHHIPGFVQETSRI LDESEDTLPYPPQ
 REANIYMPQNIKPALQRTAIEILAWGLRNMKSYQLANISSPSLVVECGGQTVQSCVIRNLRKNNPFDIC
 TLFMEVMLPREELYCPPITVKVIDNRQFGRRPVVGQCTIRSLESFLCDPYSAESPSPQGGPDDVSLSPG
 EDVLIDIDDKLEPLIPIQLADGLSSLAPTNTASPPSPHEEEFIDWWSKFFASIGEREKCGSYLEKDFDTL
 KYYDTQLENVEAFEGLSDFCNTFKLYRGKTQEETEDPSVIGEFKGLFKIYPLPEDPAIPMPRQFHQLAA
 QGPQECLVRIYIVRAFLQPKDPNGKCDPYIKISIGKKSVDQDNYIPCTLEPVFGKMFELTCTLPLEKD
 LKITLYDYDLLSKDEKIGETVVDLENRLLSKFGARCGLPQTYCVSGPNQWRDQLRPSQLLHLFCQQHRVK
 APVYRTDRVMFQDKEYSIEEIEAGRIPNPHLGPVEERLALHVLQQGLVPEHVESRPLYSPLQPDIEQGG
 LQMWVDLFPKALGRPGPPFNITPRRARRFFLRICIWNTRDVILDDLSTGKMSDIYVKGWMI GFEEHKQ
 KTDVHYRSLGEGNFNWRIFFPFDYLPAEQVCTIAKKDAFWRLDKTESKIPARVVFQIWDNDKFSFDDFL
 GSLQLDLNRMPKPAKTAKKCSLDQLDDAFHPEWVSLFEQKTVKGGWPCVAEEGKILAGKLEMTLEIV
 AESEHEERPAGQGRDEPNMNPKLEDRRPTDTSFLWFTSPYKTMKFI LWRFRWAIILFIILFILLFLAI
 FIYAFPNYAAMKLVKPF

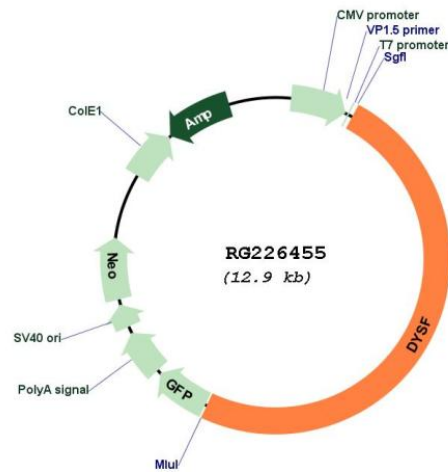
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001130981

ORF Size: 6354 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:	<ol style="list-style-type: none">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_001130981.2
RefSeq Size:	7004 bp
RefSeq ORF:	6357 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]