

Product datasheet for **RC225977**

Dystrotelin (DYTN) (NM_001093730) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Dystrotelin
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC225977 representing NM_001093730
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATCCAGATAAACAAGATGCTCTTAATAGTATTGAGAATTCATTTATAGAACAGCCTTCAAATTAC
 AATCAGTGCAACTCTGTGCCAGTTGGACTTGATTGACAGCTCCCTGATTGACAGGTCCTACTGCGTCC
 AAGTTTCTGGGAAGCTCGCAAGCACTCCCTTTCTGTGACGCAACTTTCTCAGGCACTCCAAGAGCTGTTT
 CAGAAGGCCAGGGAGGAAAACCCAGGACAAGTGATCCAGAGCTCCGGAACCTCACTCTGAGCCTTCTCA
 CGACAATGTACAACAGCAAAGGAACAGGTTTCTCCAGCTTATGCCTGCGGCGCTGCCCTAATAACCCCT
 CTCAGGAGACAGCCCTCTTTCAAAATACCGAGCTCTTTTCAACTCTATGCAGAAAAATAGCAGGGGAGGC
 TATGATTCTGGGCCACGCATGACTCGAAGGGTTTGAAGAACTACTAACAGATCTACAGCAGATCCCAA
 CTTTCGTGGGAGAGAGTCTGTCTGTGCCCTGTGAAAGTGCCACCCGACGCTGTTTCAAGGGGTGTT
 GAGCCAGCAATCAAAGAAGAAAAATCTGTCTTGGGTCCAATCTGAGCCTCCCATCTCTGTGGCTC
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 TCCCAATCACGGGACTCAGATACCGCTGTCTGAAGTGTCTCAACTTTGACATCTGCCAGATGTTTTCTT
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 GCTCCTTAAAAACAGTTAAACCAATACAAGACAAGTTGCAAGCTATATACCTCCAGGAAGAAAGA
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 ACTGAAGATGCTTCAACAGGGGAACCTCTTCTAAGCTTGATGAGGTTGACAGAAGTCACAGAAGTCACA
 CAAATGCAGAGCATGCTCTGCGAAATCCAGAATCACCAGAGACCACTTTGCACAGCACCAGGGCACAAG
 CCAAACACAAAAGATGCCACAGAAAGTCATTAGTGCCTACCCAGTTATCAGGAGGGACTGAAGCAGGAC
 ATCCCCAAAATGGTTCTGCTGAAATGAGCAGTCTGCTCTGGCAGCCGTGGAAAAGAAAGAGGCAGGTA
 ACATCAAGGAGAGAAAGGATGAGCTGGAGGAAGAGGAAGTCAAGAACTATTGTCAAACTTATGGATGC
 CTTCAATCTAGAAACGCCATCAGGCCCGGAGTCTTCAGTAAACATGGACCTGTACAGTGGAGCTCAGCGA
 GTGTGACGGCCTTCTGCGCTTGTGATCAAAATGCCTTGCCCAATTTGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC225977 representing NM_001093730
 Red=Cloning site Green=Tags(s)

MDPDKQDALNSIENSIYRTAFKLQSVQTLQQLDLIDSLIQQVLLRPSFWEARKHLSVQQLSQALQELF
 QKAREENPGQVHPRAPELTLSLLTMYNSKGTGFLQLMPAAALITLSGDSPLSKYRALFQLYAENSRGG
 YDSGPRMTRRVLRLKLLTDLQQIPTFVGESRALCPVESATRSCFQGVLSPAIKEEFKLSWVQSEPPILLWL
 PTCHRLSAAERVTHPARCTLCRTFPITGLRYRCLKCLNFDICQMCFLSGLHSKSHQKSHPVIEHCIQMSA
 MQNTKLLFRTLNNLLQGRCKKEAARRQQLLDQVNPKGVPHPHAQARLLKKQLNQYKDKLQAIYTSQEER
 ICRFETRIHKLKTNQDSLWTKLQQIRRDQLARLQPPGPSSSSFQNVGNKVDHSSTEKVPKGGDYLIQKNA
 TEDASTGEPLPKLDEVDRSHRSHTNAEHALRNPESPETTLHSTRAQSQTQKMPQKVISALPSYQEGLKQD
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 VCRAFSALVDQIALPNLK

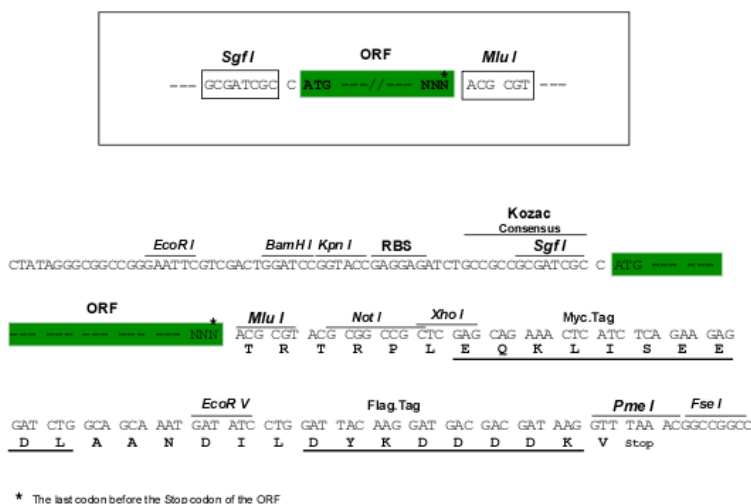
TRTRPLE**QKLI**SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8034_b05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_001093730

ORF Size: 1734 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22µm filter is required.

RefSeq: NM_001093730.1, NP_001087199.1

RefSeq ORF: 1737 bp

Locus ID: 391475

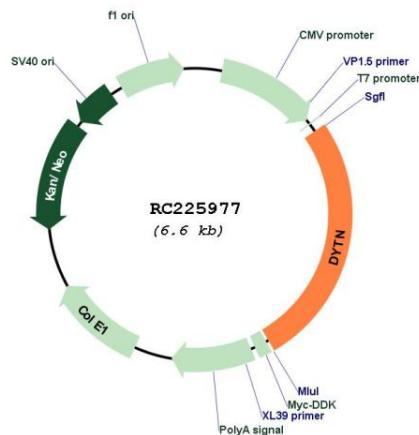
UniProt ID: [A2CJ06](#)

Cytogenetics: 2q33.3

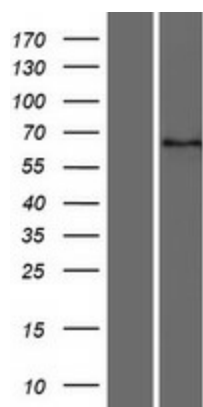
MW: 65.1 kDa

Gene Summary: This gene belongs to the dystrophin superfamily, which is characterized by the presence of four EF-hand motifs and a ZZ-domain. It is a likely ortholog of the Drosophila 'discontinuous actin hexagon' gene. It is noteworthy that the coding region of this gene lacks two coding exons that are found in the mouse ortholog. Human transcripts including these two exons are subject to nonsense-mediated transcript decay (NMD). On the other hand, transcripts skipping the two coding exons are expressed at very low levels. While this gene maintains an intact CDS, it may be an evolving pseudogene. However, after a discussion about this gene within the RefSeq group, as well as in the consensus coding sequence (CCDS) collaboration, it was decided to keep it as a protein-coding gene in the RefSeq, Ensembl-GENCODE and the CCDS sets. [provided by RefSeq, Jul 2019]

Product images:



Circular map for RC225977



Western blot validation of overexpression lysate (Cat# [LY425986]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225977 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).