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 SC300922

Dynamin 2 (DNM2) (NM_001005362) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dynamin 2 (DNM2) (NM_001005362) Human Untagged Clone
Tag:	Tag Free
Symbol:	DNM2
Synonyms:	CMT2M; CMTDI1; CMTDIB; DI-CMTB; DYN2; DYNII; LCCS5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

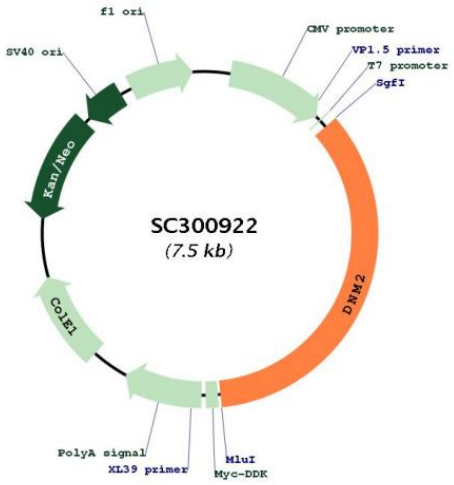
Fully Sequenced ORF:

>SC300922 representing NM_001005362.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGCAACCGCGGGATGGAAGAGCTGATCCCGCTGGTCAACAAACTGCAGGACGCCTTCAGCTCCATC
GGCCAGAGCTGCCACCTGGACCTGCCGCAGATCGCTGTAGTGGGCGGCCAGAGCGCCGGCAAGAGCTCG
GTGCTGGAGAACTTCGTGGGCCGGGACTTCCTTCCCCGCGGTTCAGGAATCGTCACCCGGCGGCCTCTC
ATTCTGCAGCTCATCTTCTCAAAAACAGAACATGCCGAGTTTTTGCACTGCAAGTCCAAAAAGTTTACA
GACTTTGATGAAGTCCGGCAGGAGATTGAAGCAGAGACCGACAGGGTCACGGGGACCAACAAAGGCATC
TCCCCAGTGCCCATCAACCTTCGAGTCTACTCGCCACACGTGTTGAACTTGACCCTCATCGACCTCCCG
GGTATCACCAAGGTGCCTGTGGGCGACCAGCCTCCAGACATCGAGTACCAGATCAAGGACATGATCCTG
CAGTTCATCAGCCGGGAGAGCAGCCTCATTCTGGCTGTCACGCCCGCCAACATGGACCTGGCCAACTCC
GACGCCCTCAAGCTGGCCAAGGAAGTCGATCCCCAAGGCCTACGGACCATCGGTGTCATCACCAAGCTT
GACCTGATGGACGAGGGCACCGACGCCAGGGACGTCTTGGAGAACAAGTTGCTCCCGTTGAGAAGAGGC
TACATTGGCGTGGTGAACCGCAGCCAGAAGGATATTGAGGGCAAGAAGGACATCCGTGCAGCACTGGCA
GCTGAGAGGAAGTTCTTCCTCTCCCACCCGGCCTACCGGCACATGGCCGACCGCATGGGCACGCCACAT
CTGCAGAAGACGCTGAATCAGCAACTGACCAACCACATCCGGGAGTCGCTGCCGGCCCTACGTAGCAAA
CTACAGAGCCAGCTGCTGTCCCTGGAGAAGGAGGTGGAGGAGTACAAGAACTTTCGGCCCGACGACCCC
ACCCGCAAAACCAAAGCCCTGCTGCAGATGGTCCAGCAGTTTGGGGTGGATTTTGAGAAGAGGATCGAG
GGCTCAGGAGATCAGGTGGACACTCTGGAGCTCTCCGGGGGCGCCCGAATCAATCGCATCTTCCACGAG
CGGTTCCCATTTGAGCTGGTGAAGATGGAGTTTGACGAGAAGGACTTACGACGGGAGATCAGCTATGCC
ATTAAGAACATCCATGGAGTCAGGACGGGGCTCTTCACCCCCGACATGGCCTTTGAAGCCATTGTGAAA
AAACAGATTGTAAAACTCAAAGAGCCGAGTTTGAAGTGTGTTGATCTCGTGGTCTCAGAGCTGGCCACG
GTCATAAAAAAGTGTGCCGAGAAGCTCAGTTCCTACCCCCGGTTGCGAGAGGAGACAGAGCGAATCGTC
ACCACTTACATCCGGGAACGGGAGGGGAGAACGAAGGACCAGATTCTTCTGCTGATCGACATTGAGCAG
TCCTACATCAACACGAACCATGAGGACTTCATCGGGTTTGCCAATGCCCAGCAGAGGAGCACGCAGCTG
AACAAGAAGAGAGCCATCCCCAATCAGGTGATCCGCAGGGGCTGGCTGACCATCAACAACATCAGCCTG
ATGAAAGGCGGCTCCAAGGAGTACTGGTTTGTGCTGACTGCCGAGTCACTGTCCTGGTACAAGGATGAG
GAGGAGAAAGAGAAGAAGTACATGCTGCCTCTGGACAACCTCAAGATCCGTGATGTGGAGAAGGGCTTC
ATGTCCAACAAGCACGTCTTCGCCATCTTCAACACGGAGCAGAGAAACGTCTACAAGGACCTGCGGCAG
ATCGAGCTGGCCTGTGACTCCCAGGAAGACGTGGACAGCTGGAAGGCCTCGTTCCTCCGAGCTGGCGTC
TACCCCGAGAAGGACCAGGCAGAAAACGAGGATGGGGCCCAGGAGAACACCTTCTCCATGGACCCCCAA
CTGGAGCGGCAGGTGGAGACCATTCGCAACCTGGTGGACTCATACGTGGCCATCATCAACAAGTCCATC
CGCGACCTCATGCCAAAGACCATCATGCACCTCATGATCAACAATACGAAGGCCTTCATCCACCACGAG
CTGCTGGCCTACCTATACTCCTCGGCAGACCAGAGCAGCCTCATGGAGGAGTCGGCTGACCAGGCACAG
CGGCGGGACGACATGCTGCGCATGTACCATGCCCTCAAGGAGGCGCTCAACATCATCGGTGACATCAGC
ACCAGCACTGTGTCCACGCCTGTACCCCCGCCTGTCGATGACACCTGGCTCCAGAGCGCCAGCAGCCAC
AGCCCCACTCCACAGCGCCGACCGGTGTCCAGCATACACCCCCCTGGCCGGCCCCCAGCAGTGAGGGGC
CCCACTCCAGGGCCCCCCCTGATTCCTGTTCCCGTGGGGGCAGCAGCCTCCTTCTCGGCGCCCCCAATC
CCATCCCGGCCTGGACCCCAGAGCGTGTTTGCCAACAGTGACCTCTTCCCAGCCCCGCCTCAGATCCCA
TCTCGGCCAGTTCGGATCCCCCCAGGGATTCCCCCAGGAGTGCCCAGCAGAAGACCCCCTGCTGCGCCC
AGCCGGCCCACCATTATCCGCCCAGCCGAGCCATCCCTGCTCGACTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM_001005362

Insert Size: 2601 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001005362.2
RefSeq Size:	3672 bp
RefSeq ORF:	2601 bp
Locus ID:	1785
UniProt ID:	P50570
Cytogenetics:	19p13.2
Protein Families:	Transcription Factors
Protein Pathways:	Endocytosis, Fc gamma R-mediated phagocytosis
MW:	97.6 kDa
Gene Summary:	Dynamins represent one of the subfamilies of GTP-binding proteins. These proteins share considerable sequence similarity over the N-terminal portion of the molecule, which contains the GTPase domain. Dynamins are associated with microtubules. They have been implicated in cell processes such as endocytosis and cell motility, and in alterations of the membrane that accompany certain activities such as bone resorption by osteoclasts. Dynamins bind many proteins that bind actin and other cytoskeletal proteins. Dynamins can also self-assemble, a process that stimulates GTPase activity. Five alternatively spliced transcripts encoding different proteins have been described. Additional alternatively spliced transcripts may exist, but their full-length nature has not been determined. [provided by RefSeq, Jun 2010] Transcript Variant: This variant (4) lacks two alternate in-frame exons and includes an alternate in-frame exon, compared to variant 1. The resulting protein (isoform 4) is shorter, compared to isoform 1.