

Product datasheet for **SC300921**

Dynamin 2 (DNM2) (NM_001005361) Human Untagged Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Dynamin 2 (DNM2) (NM_001005361) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Dynamin 2 |
| Synonyms: | CMT2M; CMTD11; CMTDIB; DI-CMTB; DYN2; DYNII; LCCS5 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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Fully Sequenced ORF: >SC300921 representing NM_001005361.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGGCAACCCGCGGATGGAAGAGCTGATCCCGCTGGTCAACAACTGCAGGACGCCTTCAGCTCCATC
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GTGCTGGAGAACTTCGTGGGCCGGGACTTCCTTCCCGCGGTTTCAGGAATCGTCACCCGGCGGCCTCTC
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GGTATACCAAGGTGCCTGTGGGCGACCAGCCTCCAGACATCGAGTACCAGATCAAGGACATGATCTTG
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GACCAGGCACAGCGCGGGACGACATGCTGCGCATGTACCATGCCCTCAAGGAGGCGCTCAACATCATC
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GGCCCCCAATCCATCCCGCCTGGACCCAGAGCGTGTGGCCAACAGTGACCTTCTCCAGCCCCG
CCTCAGATCCCATCTCGGCCAGTTCGGATCCCCCAGGGATTCCCCCAGGAGTGCCAGCAGAAGACCC
CCTGCTGCGCCAGCCGGCCACCATTATCCGCCAGCCGAGCCATCCCTGCTCGACTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
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Restriction Sites: SgfI-MluI
ACCN: NM_001005361
Insert Size: 2613 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_001005361.2](#)

RefSeq Size: 3684 bp

RefSeq ORF: 2613 bp

Locus ID: 1785

UniProt ID: [P50570](#)

Cytogenetics: 19p13.2

Protein Families: Transcription Factors

Protein Pathways: Endocytosis, Fc gamma R-mediated phagocytosis

MW: 98 kDa

Gene Summary:

Dynammins 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. Dynammins 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. Dynammins bind many proteins that bind actin and other cytoskeletal proteins. Dynammins 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 (2) lacks an alternate in-frame exon and includes an alternate in-frame exon, compared to variant 1. The resulting protein (isoform 2) is the same length as isoform 1 but differs in an internal region, compared to isoform 1.