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Product datasheet for SC324242

Dynamin 2 (DNM2) (NM_004945) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dynamin 2 (DNM2) (NM_004945) Human Untagged Clone
Tag:	Tag Free
Symbol:	Dynamin 2
Synonyms:	CMT2M; CMTDI1; CMTDIB; DI-CMTB; DYN2; DYNII; LCCS5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_004945.2
GCGGCGACCGTGAGGCCGAGCCGGGAGCGGGCGTCTTGCCGAGGCCCGGGCGGGCGGGGA
GCAACGGCTACAGACGCCGCGGGGCCAGGTCGTTGAGGGTCGGCGGCGGGCGAGGAGCGC
AGGGCGCTCGGGCCGGGGGCCGCCGGCGCCATGGGCAACCGCGGGATGGAAGAGCTGATC
CCGCTGGTCAACAAACTGCAGGACGCCTTCAGCTCCATCGGCCAGAGCTGCCACCTGGAC
CTGCCGCAGATCGCTGTAGTGGGCGGCCAGAGCGCCGGCAAGAGCTCGGTGCTGGAGAAC
TTCGTGGGCCGGGACTTCCTTCCCCGCGGTTCAGGAATCGTCACCCGGCGGCCTCTCATT
CTGCAGCTCATCTTCTCAAAAACAGAACATGCCGAGTTTTTGCACTGCAAGTCCAAAAAG
TTTACAGACTTTGATGAAGTCCGGCAGGAGATTGAAGCAGAGACCGACAGGGTCACGGGG
ACCAACAAAGGCATCTCCCCAGTGCCCATCAACCTTCGAGTCTACTCGCCACACGTGTTG
AACTTGACCCTCATCGACCTCCCGGGTATCACCAAGGTGCCTGTGGGCGACCAGCCTCCA
GACATCGAGTACCAGATCAAGGACATGATCCTGCAGTTCATCAGCCGGGAGAGCAGCCTC
ATTCTGGCTGTCACGCCCGCCAACATGGACCTGGCCAACTCCGACGCCCTCAAGCTGGCC
AAGGAAGTCGATCCCCAAGGCCTACGGACCATCGGTGTCATCACCAAGCTTGACCTGATG
GACGAGGGCACCGACGCCAGGGACGTCTTGGAGAACAAGTTGCTCCCGTTGAGAAGAGGC
TACATTGGCGTGGTGAACCGCAGCCAGAAGGATATTGAGGGCAAGAAGGACATCCGTGCA
GCACTGGCAGCTGAGAGGAAGTTCTTCCTCTCCCACCCGGCCTACCGGCACATGGCCGAC
CGCATGGGCACGCCACATCTGCAGAAGACGCTGAATCAGCAACTGACCAACCACATCCGG
GAGTCGCTGCCGGCCCTACGTAGCAAACTACAGAGCCAGCTGCTGTCCCTGGAGAAGGAG
GTGGAGGAGTACAAGAACTTTCGGCCCGACGACCCCACCCGCAAAACCAAAGCCCTGCTG
CAGATGGTCCAGCAGTTTGGGGTGGATTTTGAGAAGAGGATCGAGGGCTCAGGAGATCAG
GTGGACACTCTGGAGCTCTCCGGGGGCGCCCGAATCAATCGCATCTTCCACGAGCGGTTC
CCATTTGAGCTGGTGAAGATGGAGTTTGACGAGAAGGACTTACGACGGGAGATCAGCTAT
GCCATTAAGAACATCCATGGAGTCAGGACCGGGCTTTTCACCCCGGACTTGGCATTCGAG
GCCATTGTGAAAAAGCAGGTCGTCAAGCTGAAAGAGCCCTGTCTGAAATGTGTCGACCTG
GTTATCCAGGAGCTAATCAATACAGTTAGGCAGTGTACCAGTAAGCTCAGTTCCTACCCC
CGGTTGCGAGAGGAGACAGAGCGAATCGTCACCACTTACATCCGGGAACGGGAGGGGAGA

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ACGAAGGACCAGATTCTTCTGCTGATCGACATTGAGCAGTCCTACATCAACACGAACCAT
GAGGACTTCATCGGGTTTGCCAATGCCCAGCAGAGGAGCACGCAGCTGAACAAGAAGAGA
GCCATCCCCAATCAGGTGATCCGCAGGGGCTGGCTGACCATCAACAACATCAGCCTGATG
AAAGGCGGCTCCAAGGAGTACTGGTTTGTGCTGACTGCCGAGTCACTGTCCTGGTACAAG
GATGAGGAGGAGAAAGAGAAGAAGTACATGCTGCCTCTGGACAACCTCAAGATCCGTGAT
GTGGAGAAGGGCTTCATGTCCAACAAGCACGTCTTCGCCATCTTCAACACGGAGCAGAGA
AACGTCTACAAGGACCTGCGGCAGATCGAGCTGGCCTGTGACTCCCAGGAAGACGTGGAC
AGCTGGAAGGCCTCGTTCCTCCGAGCTGGCGTCTACCCCGAGAAGGACCAGGCAGAAAAC
GAGGATGGGGCCCAGGAGAACACCTTCTCCATGGACCCCCAACTGGAGCGGCAGGTGGAG
ACCATTCGCAACCTGGTGGACTCATACGTGGCCATCATCAACAAGTCCATCCGCGACCTC
ATGCCAAAGACCATCATGCACCTCATGATCAACAATACGAAGGCCTTCATCCACCACGAG
CTGCTGGCCTACCTATACTCCTCGGCAGACCAGAGCAGCCTCATGGAGGAGTCGGCTGAC
CAGGCACAGCGGCGGGACGACATGCTGCGCATGTACCATGCCCTCAAGGAGGCGCTCAAC
ATCATCGGTGACATCAGCACCAGCACTGTGTCCACGCCTGTACCCCCGCCTGTCGATGAC
ACCTGGCTCCAGAGCGCCAGCAGCCACAGCCCCACTCCACAGCGCCGACCGGTGTCCAGC
ATACACCCCCCTGGCCGGCCCCCAGCAGTGAGGGGCCCCACTCCAGGGCCCCCCCTGATT
CCTGTTCCCGTGGGGGCAGCAGCCTCCTTCTCGGCGCCCCCAATCCCATCCCGGCCTGGA
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CCAGTTCGGATCCCCCCAGGGATTCCCCCAGGAGTGCCCAGCAGAAGACCCCCTGCTGCG
CCCAGCCGGCCCACCATTATCCGCCCAGCCGAGCCATCCCTGCTCGACTAGGCCTCGAGG
GGGGCGTGCTCTCGGGGGGGCCTCACGCACCCGCGGCGCAGGAGCTTCAGTGGTCTGGGG
CCCTCCGCCGCCCCTATGCTGGGACCAGGCTCCCAGTGGGCAGCCCTGGCCTCTTCCTTA
ACGCTGGCCCCGGTCCAGGGCCGGCCCCTGTGCCTGGCTGGACACCGCACTGCGCAAAGG
GGCCCTGGAGCTCCAGGCAGGGGGCGCTGGGGTGTTGCACTTTGGGGGATGGAGTCTCAG
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GGGACTCTACCAAGGTCTTCTTGGGCTGGGAAAGCCCATGTAGGGCAGGCCTTCTATAAG
TGCGGGCACCAAGGGCGCCTACATCCCCAGGCCTTGCTGGGGTGCAGGGGTATATCAACT
TCCCATTAGCAGGAGCTCCCCAGCGGCAAGCCTGGCCCAGTGGGCTCGGTAGTGCCCAGC
TGGCAGGCCTGAGGTGTACATAGTCCTTCCCGGCCATATTAACCACACAGCCTGAGCCTG
GCCCAGCCTCGGCTGCCAGAGGTGCCTTTGCTAGGCCCGGAGCCGTTGGCCCGGGCCGGC
CTTGCCCTATTCCTCTCCTCCTCCTCCTCCTGGGTCCCCCAGGGTGGCTGGGCTTGGGCT
ATGTGGGTGGTGGTGGCGGGGGGTCTTGGGGGCCTCTCAGCTCCCGCCCATGCCTCCCTG
ATGGGTGGGCCCAGGGCGGCCTCTCTCTGAGGAGACCTCACCCACTCCTCGCTCAGTTTG
ACCACTGTAAGTGCCTGCACTCTGTATTCTATTAAAAAAAAAAAAAAA

Restriction Sites: ECoRI-NOT

ACCN: NM_004945

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_004945.2, NP_004936.2
RefSeq Size:	3621 bp
RefSeq ORF:	2601 bp
Locus ID:	1785
UniProt ID:	P50570
Cytogenetics:	19p13.2
Domains:	dynamin_2, dynamin, PH, GED
Protein Families:	Transcription Factors
Protein Pathways:	Endocytosis, Fc gamma R-mediated phagocytosis
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 (3) lacks an alternate in-frame exon, compared to variant 1. The resulting protein (isoform 3) is shorter, compared to isoform 1.