

## Product datasheet for **MR231296**

### **Dnm2 (NM\_001253893) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dnm2 (NM_001253893) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dnm2
Synonyms:	b2b2159Clo; Dyn2; Udnm
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR231296 representing NM\_001253893  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGCAACCGGGGATGGAAGAGCTCATCCCGCTGGTTAAACAAGCTGCAGGACGCCTTCAGCTCCATCG  
 GTCAGAGCTGCCACCTGGACCTGCCGAGATCGCCGTGGTGGGCGCCAGAGCGCCGCAAAAGTTCGGT  
 GCTCGAGAACTTCGTGGGCCGGGACTTCCTTCCACGAGGATCAGGAATTGTCACCCGGAGGCCTCTCATT  
 CTGCAGCTCATCTTTCCAAAACAGAATATGCGGAATTTTTCAGCTGCAAGTCCAAAAATTTACAGACT  
 TTGATGAAGTCCGGCAGGAGATCGAAGCAGAGACTGACCGGGTACAGGCCACCAAAAGGCATCTCCCC  
 TGTGCCATCAACCTTCGGTCTACTCACCACAGTGTGAAGTTCAGCCCTCATCGACTCCAGGCATC  
 ACTAAGGTGCCGGTGGGGACCAGCCGACAGATCGAGTACCAGATCAAGGACATGATCCTGCAGTTCA  
 TCAGCCGCGAGAGCAGCCTCATTCTTCCGTACACCTGCCAACATGGACTTGGCCAACTCAGACGCCCT  
 CAAGCTGGCCAAGGAGGTGGACCCCAAGGCCTACGGACCATCGTGTGCATCACAAGCTAGACTTGATG  
 GATGAAGGCACAGACGCCAGGGATGTCTGGAAAACAAGCTACTGCCCTTGAGAAGAGGCTATATCGGGC  
 TGGTTAACCGAAGCCAGAAAGACATCGAGGGCAAAAAGGACATCCGGGCTGCTCTGGCAGCCGAGAGGAA  
 ATTCTTCTCTCCACCCAGCCTACCGGCACATGGCTGACCGCATGGGCACCCACACTTCAGAAAAACC  
 CTGAACCAGCAACTGACCAACCACATCCGAGAGTCACTGCCGACCTTCGAGCAAGCTGCAGAGCCAAC  
 TGCTGTCCCTGGAGAAGGAAGTGAAGAGTACAAGAATTTCCGGCCTGATGACCCACGCGCAAGACCAA  
 AGCCCTGCTGCAGATGGTTCAGCAGTTTGGAGTGGACTTGGAGAAGCAATTGAAGGCTCGGGAGATCAA  
 GTAGACACACTAGAGTTGCTGGTGGAGCCGCATCAATCGTATCTTTCATGAGCGCTTTCCCTTTGAAC  
 TGGTAAAGATGGAGTTTATGAGAAAGATCTACGAAGAGAGATCAGCTATGCTATTAAGAACATCCACGG  
 AGTCAGAACTGGGCTCTTACGCGGATTTGGCGTTCGAGGCCATTGTGAAAAAGCAGGTGGTCAAGCTG  
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 GCAAGCTGAGTTCCTACCCCGGCTGCGAGAGGAGACCGAGCAATTGTCACCACCTACATCAGGGAGCG  
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 GAAGACTTCATTGGATTTGCCAATGCCAGCAGAGGAGCAGCAGCTGAACAAGAAGAGGGCCATACCCA  
 ATCAGGGGGAGATCTTGGTATCCGAGGGGCTGGTTGACCATCAACAATATCAGCTTGATGAAGGGTGG  
 CTCCAAGGAGTACTGGTTCGTGCTGACAGCTGAGTCATTGTCTTGGTACAAGGATGAGGAGGAGAAAGAA  
 AAGAAGTACATGCTGCCACTGGACAACCTCAAGATCCGGGACGTGAAAAGGGCTTCATGTCCAACAAGC  
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 TGAATCCAGGAAGATGTGGACAGCTGGAAGGCTTCGTTCTGCGCGCTGGGGTCTACCCAGAGAAGGAC  
 CAGGCAGAGAATGAGGATGGAGCACAAGAGAACACCTTCTCCATGGACCCGACGCTGGAGCGACAGGTGG  
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 GACCATCATGCACCTCATGATCAACAACACAAAGGCCTTCATCCACCATGAGCTGCTGGCTTACCTGTAT  
 TCATCAGCAGACCAGAGCAGCCTCATGGAAGAGTCAAGGAGCAGGCTCAGCGGGGACGACATGCTGC  
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 CCGAGCCGTCCCTGCTCGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231296 representing NM\_001253893  
 Red=Cloning site Green=Tags(s)

MGNRGMEELIPLVNLQDAFSSIGQSCHLDLPQIAVVGGSAGKSSVLENFVGRDFLPRGSGIVTRRPLI  
 LQLIFSKTEYAEFLHCKSKKFTDFDEVQRQIEAETDRVTGNTKGI SPVPINLRVYSPHVLNLTIDLPGI  
 TKVPVGDQPPDIEYQIKDMILQFISRESSLILAVTPANMDLANSALKLAKEVDPQGLRTIGVITKLDLM  
 DEGTDARDVLENKLLPLRRGYIGVVNRSQKDIIEGKKDIRAALAAERKFFLSHPAYRHMADRMGTPHLQKT  
 LNQQLTNHIRESLPTLRSKLQSLLSLEKEVEEYKNFRPDDPTRKTKALLQMVQQFGVDFEKRIEESGDQ  
 VDTLELSGGARINRIFHERFPFELVKMEFDEKDLRREISYAIKNIHGVRTGLFTPDLAFAEIVKKQVVKL  
 KEPCLKCVDLVIQELISTVRQCTSKLSSYPRLREETERIVTTYIREREGRTKDQILLIDIEQSYINTNH  
 EDFIGFANAQRSTQLNKKRAIPNQGEILVIRGWL TINNISLMKGSKEYWFL TAESLSWKDEEEKE  
 KKYMLPLDNLKIRDVEKGFMSNKHVFAIFNTEQRNVYKDLRQIELACDSQEDVDSWKASFLRAGVYPEKD  
 QAENEDGAQENTFSMDPQLERQVETIRNLVDSYVAIINKSIRDLMPKTIMHLMINNTKAFIHHELLAYLY  
 SSADQSSLMEESAQAQRDDMLRMYHALKEALNIIGDISTSTVSTPVPVPPVDDTWLQNTSGHSPTPQR  
 PVSSVHPPGRPPAVRGPTPGPPLIPMPVGATSSFSAPPISRPGPQSVFANNDPFSAPPQIPSRPARIPP  
 GIPPGVPSRRAPAAPSRPTIIRPAEPLLD

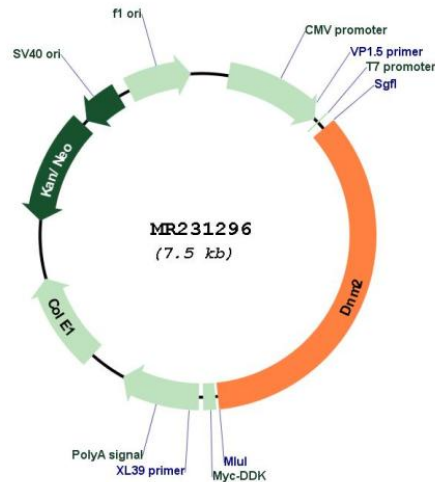
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001253893

**ORF Size:** 2610 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.

**RefSeq:** [NM\\_001253893.1](#), [NP\\_001240822.1](#)

**RefSeq Size:** 3582 bp

**RefSeq ORF:** 2613 bp

**Locus ID:** 13430

**UniProt ID:** [P39054](#)

**Cytogenetics:** 9 7.79 cM

**MW:** 98.6 kDa

**Gene Summary:** Microtubule-associated force-producing protein involved in producing microtubule bundles and able to bind and hydrolyze GTP. Plays a role in the regulation of neuron morphology, axon growth and formation of neuronal growth cones (By similarity). Plays an important role in vesicular trafficking processes, in particular endocytosis. Involved in cytokinesis (PubMed:18923138). Regulates maturation of apoptotic cell corpse-containing phagosomes by recruiting PIK3C3 to the phagosome membrane (PubMed:18425118).[UniProtKB/Swiss-Prot Function]