

## Product datasheet for **MR211146**

### **Dnmt3a (NM\_007872) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dnmt3a (NM_007872) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dnmt3a
Synonyms:	MmullIA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR211146 representing NM\_007872  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCCTCCAGCGCCCCGGGGACACCAGCAGCTCCTCTCTGGAGCGGGAGGATGATCGAAAGGAAGGAG  
 AGGAACAGGAGGAGAACCGTGGCAAGGAAGAGCGCCAGGAGCCAGCGCCACGGCCCCGAAGGTGGGGAG  
 GCCTGGCCGGAAGCGCAAGCACCCACCGGTGAAAGCAGTGACACCCCAAGGACCCAGCAGTGACCACC  
 AAGTCTCAGCCATGGCCAGGACTCTGGCCCCTCAGATCTGCTACCCAATGGAGACTTGGAGAAGCGGA  
 GTGAACCCCAACCTGAGGAGGGGAGCCAGCTGCAGGGCAGAAGGGTGGGGCCCCAGCTGAAGGAGAGGG  
 AACTGAGACCCACCAGAAGCCTCCAGAGCTGTGGAGAATGGCTGCTGTGTGACCAAGGAAGGCCGTGGA  
 GCCTCTGCAGGAGAGGGCAAAGAACAGAAGCAGACCAACATCGAATCCATGAAAATGGAGGGCTCCCGGG  
 GCCGACTGCGAGGTGGCTTGGGTGGGAGTCCAGCCTCCGTGAGCGACCCATGCCAAGACTCACCTTCCA  
 GGCAGGGGACCCCTACTACATCAGCAAACGAAACGGGATGAGTGGCTGGCACGTTGAAAAGGGAGGCT  
 GAGAAGAAAGCCAAGGTAAATGCAGTAATGAATGCTGTGGAAGAGAACCAGGCCTCTGGAGAGTCTCAGA  
 AGGTGGAGGAGGCCAGCCCTCCTGCTGTGCAGCAGCCACGGACCTGCTTCTCCGACTGTGGCCACCAC  
 CCCTGAGCCAGTAGGAGGGGATGCTGGGGACAAGAATGCTACCAAGCAGCCGACGATGAGCCTGAGTAT  
 GAGGATGGCCGGGGCTTTGGCATTGGAGAGCTGGTGTGGGGGAAACTTCGGGGCTTCTCCTGGTGGCCAG  
 GCCGAATTGTGTCTTGGTGGATGACAGGCCGGAGCCGAGCAGCTGAAGGCACTCGCTGGGTGATGTGGTT  
 CGGAGATGGCAAGTCTCAGTGGTGTGTGTGGAGAAGCTCATGCCGCTGAGCTCCTTCTGCAGTGCATTC  
 CACCAGGCCACCTACAACAAGCAGCCCATGTACCGCAAAGCCATCTACGAAGTCTCCAGGTGGCCAGCA  
 GCCGTGCCGGGAAGCTGTTCCAGCTTGCCATGACAGTGATGAAAGTGACAGTGGCAAGGCTGTGGAAT  
 GCAGAACAAGCAGATGATTGAATGGGCCCTCGGTGGCTTCCAGCCCTCGGGTCTAAGGGCCTGGAGCCA  
 CCAGAAGAAGAGAAGAATCCTTACAAGGAAGTTTACACCGACATGTGGGTGGAGCCTGAAGCAGCTGCTT  
 ACGCCCCACCCACCAGCCAAGAAACCCAGAAAGAGCACAACAGAGAAACCTAAGGTCAAGGAGATCAT  
 TGATGAGCGCACAAAGGAGCGGCTGGTGTATGAGGTGCGCCAGAAGTGCAGAAACATCGAGGACATTTGT  
 ATCTCATGTGGGAGCCTCAATGTCACCCTGGAGCACCCTTTCATTGGAGGCATGTGCCAGAACTGTA  
 AGAACTGCTTCTTGGAGTGTGCTTACCAGTATGACGACGATGGGTACCAGTCTATTGCACCATCTGCTG  
 TGGGGGGCGTGAAGTGTCTATGTGTGGGAACAACAAGTGTGTCAGGTGCTTTTGTGTCGAGTGTGGAT  
 CTCTTGGTGGGGCCAGGAGCTGCTCAGGCAGCCATTAAGGAAGACCCCTGGAAGTGTACATGTGCGGGC  
 ATAAGGGCACCTATGGGCTGCTGCGAAGACGGGAAGACTGGCCTTCTCGACTCCAGATGTTCTTTGCCAA  
 TAACCATGACCAGGAATTTGACCCCAAGGTTTACCCACCTGTGCCAGCTGAGAAGAGGAAGCCCATC  
 CGCGTGTCTCTCTTTGATGGGATTGCTACAGGGCTCCTGGTGTGTAAGGACCTGGGCATCCAAGTGG  
 ACCGCTACATTGCCTCCGAGGTGTGTGAGGACTCCATCACGGTGGGCATGGTGGCCACCAGGAAAGAT  
 CATGTACGTGGGGACGTCCGCAGCGTCACACAGAAGCATATCCAGGAGTGGGGCCATTTCGACCTGGTG  
 ATTGGAGGCAGTCCCTGCAATGACCTCTCCATTGTCAACCCTGCCGCAAGGGACTTTATGAGGGTACTG  
 GCCGCTCTTCTTTGAGTCTACCGCTCCTGCATGATGCGCGGCCCAAGGAGGGAGATGATCGCCCTT  
 CTCTGGCTCTTTGAGAATGTGGTGGCCATGGGCGTTAGTGACAAGAGGGACATCTCGCATTTCTTGAG  
 TCTAACCCCGTATGATTGACGCCAAAGAAGTGTCTGCTGCACACAGGGCCCGTTACTTCTGGGGTAACC  
 TTCTGGCATGAACAGGCCTTTGGCATCCACTGTGAATGATAAGCTGGAGCTGCAAGAGTGTCTGGAGCA  
 CGGCAGAAATAGCCAAGTTCAGCAAAGTGAAGACCATACCACCAGGTCAAACCTATAAAGCAGGGCAAA  
 GACCAGCATTTCCCGTCTTATGAACGAGAAGGAGGACATCCTGTGGTGCAGTAAATGAAAAGGGTGT  
 TTGGCTTCCCGTCCACTACACAGAGCTCTCAACATGAGCCGCTTGGCGAGGCAGAGACTGCTGGGCC  
 ATCGTGGAGCGTCCGGTATCCGCCACCTCTTCGCTCCGCTGAAGGAATATTTTGTCTGTGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR211146 representing NM\_007872  
 Red=Cloning site Green=Tags(s)

MPSSGPGDTSSSSLEREDDRKEGEEQEENRGKEERQEPSATARKVGRPGRKRKHPVSSDTPKDPVTT  
 KSQPMADSGPSDLLPNGDLEKRSEPEEGSPAAGQKGGAPAEGETETPPEASRAVENGCCVTKEGRG  
 ASAGEGKEQKQTNIESMKMEGSRGRLRGGLGWESSLRQRPMPRLTFQAGDPYYISKRKRDEWLARWKREA  
 EKKAKVIAVMNAVEENQASGESQKVEEASPPAVQPTDPASTVATTPEPVGGDAGDKNATKAADDEPEY  
 EDGRGFGIGELVWGKLRGFSWVPGRIVSWWMTGRSRAAEGTRWVMWFGDGKFSVVCVEKLMPLSSFCSAF  
 HQATYNKQPMYRKAIYEVLVQVASSRAGKLPACHDSDES DSGKAVEVQNKQMI EWALGGFQPSGPKGLEP  
 PEEENPNYKEYVTDMWVEPEAAAYAPPPAKKPRKSTTEKPKVKEIIDERTRERLVYEVQRKCRNIEDIC  
 ISCGSLNVTLEHPLFIGGMCQNCKNCFLECAQYQDDGYQSYCTICCGGREVLMCGNCCRCFCVEVD  
 LLVGPAAQAAIKEDPWNCYMGHGKTYGLLRREDWPSRLQMFANNHDQEFDPKVPYPPVPAEKRKPI  
 RVLSLFDGIATGLLVKDLGIQVDRIASEVCEDSITVGMVRHQKIMYVGDVRSVTQKHIQEWGPFDLV  
 IGGSPCNDSIVNPARKGLYEGTGRLFFEFYRLLHDARPKEGDDRPFFWL FENVVAMGVSDKRDISRFL  
 SNPVMIDAKEVSAHRARYFWGNLPGMNRPLASTVNDKLELQECLHGRIAKFSKVRTITTRSNSIKQKG  
 DQHFVPVMNEKEDILWCTEMERVFVGFVHYTDVSNMSRLARQRLGRSWSVPVIRHLFAPLKEYFACV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9032\\_a07.zip](https://cdn.origene.com/chromatograms/mm9032_a07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

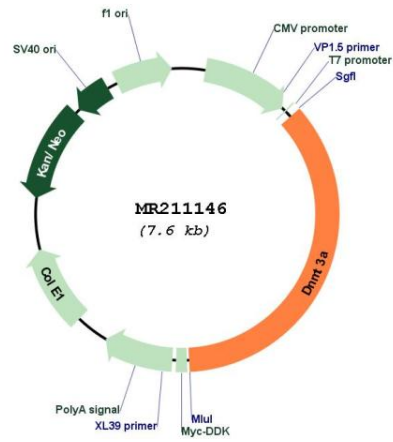


\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_007872

<b>ORF Size:</b>	2724 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_007872.4</a> , <a href="#">NP_031898.1</a>
<b>RefSeq Size:</b>	9735 bp
<b>RefSeq ORF:</b>	2727 bp
<b>Locus ID:</b>	13435
<b>UniProt ID:</b>	<a href="#">O88508</a>
<b>Cytogenetics:</b>	12 A1.1
<b>MW:</b>	102.1 kDa
<b>Gene Summary:</b>	This is one of two related genes encoding de novo DNA methyltransferases, which are responsible for the establishment of DNA methylation patterns in embryos. Loss of function of this gene causes developmental defects in multiple different organ systems. There is a pseudogene for this gene located on chromosome 3. Alternatively spliced transcript variants encoding multiple isoforms have been observed. [provided by RefSeq, Nov 2012]

Product images:



Circular map for MR211146