

## Product datasheet for **MG225606**

### **Dnmt3b (NM\_001122997) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dnmt3b (NM_001122997) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dnmt3b
Synonyms:	Mmull1B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG225606 representing NM\_001122997  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAGGGAGACAGCAGACATCTGAATGAAGAAGAGGGTGCCAGCGGGTATGAGGAGTGCATTATCGTTA  
 ATGGGAACTTCAGTGACCAGTCCCTCAGACACGAAGGATGCTCCCTCACCCCAAGTCTTGGAGGCAATCTG  
 CACAGAGCCAGTCTGCACACCAGAGACAGAGGCCGAGGTCAAGCTCCCGGCTGTCTAAGAGGGAGGTC  
 TCCAGCCTTCTGAATTACACGCAGGACATGACAGGAGATGGAGACAGAGATGATGAAGTAGATGATGGGA  
 ATGGCTCTGATATTCTAATGCCAAAGCTCACCCGTGAGACCAAGGACACCAGGACGCGCTCTGAAAGCCC  
 GGCTGTCCGAACCCGACATAGCAATGGGACCTCCAGCTTGAGAGGGCAAAGAGCCTCCCCAGAATCACC  
 CGAGGTCGGCAGGGCCGCCACCATGTGCAGGAGTACCCTGTGGAGTTTCCGGCTACCAGGTCCTGGAGAC  
 GTCGAGCATCGTCTTCAGCAAGCAGCCATGGTCATCCCCTGCCAGCGTCGACTTCATGGAAGAAGTGAC  
 ACCTAAGAGCGTCAGTACCCCATCAGTTGACTTGAGCCAGGATGGAGATCAGGAGGTATGGATACCACA  
 CAGGTGGATGCAGAGAGCAGAGATGGAGACAGCACAGAGTATCAGGATGATAAAGAGTTTGGAAAGGTTG  
 ACCTCGTGTGGGAAAGATCAAGGGCTTCTCCTGGTGGCCTGCCATGGTGGTGTCTGGAAGGCCACCTC  
 CAAGCGACAGGCCATGCCCGAATGCGCTGGGTACAGTGGTTTGGTGATGGCAAGTTTTCTGAGATCTCT  
 GCTGACAAACTGGTGGCTCTGGGGCTGTTAGCCAGCACTTAACTCTGGTACCTTCAATAAGCTGGTTT  
 CTTATAGGAAGGCCATGTACCACACTCTGGAGAAAAGCCAGGGTTCGAGCTGGCAAGACCTTCTCCAGCAG  
 TCCTGGAGAGTCACTGGAGGACAGCTGAAGCCCATGCTGGAGTGGGCCACGGTGGCTTCAAGCCTACT  
 GGGATCGAGGGCCTCAAACCCAAACAAGAAGCAACCAGTGGTTAATAAGTGAAGTGCCTGTTCCAGACA  
 GTAGGAACCTAGAACCCAGGAGACGCGAGAACAAGTGAAGACGCACAACCAATGACTCTGCTGCTTC  
 TGAGTCCCCCCCACCAAGCGCCTCAAGACAAATAGCTATGGCGGGAAGGACCGAGGGGAGGATGAGGAG  
 AGCCGAGAACGGATGGCTTCTGAAGTACCAACAACAAGGGCAATCTGGAAGACCCTGTTTGTCTGTG  
 GAAAGAAGAACCCTGTGTCTTCCACCCCTCTTTGAGGGTGGGCTCTGTGAGAGTTGCCGGATCGCTT  
 CCTAGAGCTCTTCTACATGTATGATGAGGACGGCTATCAGTCTACTGCACCGTGTGCTGTGAGGGCCGT  
 GAACTGCTGTGTGCAATAACACAAGCTGCTGCAGATGCTTCTGTGTGGAGTGTCTGGAGGTGCTGGTGG  
 GCGCAGGCACAGCTGAGGATGCCAAGCTGCAGGAACCTGGAGTGTATATGTGCTCCCTCAGCGCTG  
 CCATGGGGTCTCCGACGCAGGAAAGATTGGAACATGCGCCTGCAAGACTTCTTCACTACTGATCCTGAC  
 CTGGAAGAATTTAGGAGCCACCAAGTTGTACCCAGCAATCCTGCAGCCAAAAGGAGGCCATTAGAG  
 TCCTGTCTCTGTTGATGGAATTGCAACGGGGTACTTGGTGTCAAGGAGTTGGGTATTAAGTGGAAAA  
 GTACATTGCCCTCCGAAGTCTGTGCAAGTCCATCGCTGTGGGAACTGTTAAGCATGAAGGCCAGATCAAA  
 TATGTCAATGACGTCCGGAAAATCACCAGAAAATATTGAAGAGTGGGGCCCGTTTCGACTTGGTGATTG  
 GTGGAAGCCCATGCAATGATCTCTAACGTCAATCCTGCCCAGAAAGTTTATATGAGGGCACAGGAAG  
 GCTCTTCTCGAGTTTACCCTTGTGAATTATACCCGCCCCAAGGAGGGGACAAACCGTCCATTCTTC  
 TGGATGTTGAGAATGTTGTGGCCATGAAAGTGAATGACAAGAAAGACATCTCAAGATTCCTGGCATGTA  
 ACCCAGTGATGATCGATGCCATCAAGGTGTCTGCTGCTCACAGGGCCCGTACTTCTGGGGTAACCTACC  
 CGGAATGAACAGGCCCGTGTGGCTTCAAAGAATGATAAGCTCGAGCTGCAGGACTGCCTGGAGTTCAGT  
 AGGACAGCAAAGTTAAAGAAAGTGCAGACAATAACCACCAAGTCAAGTCCATCAGACAGGGCAAACCC  
 AGCTTTTCCCTGTAGTCATGAATGGCAAGGACGACGTTTTGTGGTGCCTGAGCTCGAAAGGATCTTCGG  
 CTTCCCTGCTCACTACACGGACGTGTCCAACATGGGCCGCGGCCCGTCAAGAGCTGCTGGCAGGTCC  
 TGGAGTGTACCGTATCAGACACCTGTTTCCCCCTGAAGGACTACTTGCCTGTGAA

**ACCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

Protein Sequence: >MG225606 representing NM\_001122997  
Red=Cloning site Green=Tags(s)

MKGDSRHLNEEGASGYEECIIVNGNFSQSSDTKDAPSPVLEAICTEPVCTPETRGRSSRLSKREV  
SSLLNYTQDMTGDGDRDDEVDDGNGSDILMPKL TRETKDTRTRSESPAVRTRHSNGTSSLERQASPRIT  
RGRQGRHHVQEYPVEFPATRSRRRRASSASTPWSSPASVDFMEEVTPKSVSTPSVDLSQGDQEGMDTT  
QVDAESRDGDSTEYQDDKEFGIGDLVWGKIKGFSWWPAMVVSWKATSKRQAMPGMRVWQWFGDGKFSEIS  
ADKLVALGLFSQHFNLATFNKLVSYRKAMYHTLEKARVRAGKTFSSSPGESLEDQLKPMLEWAHGGFKPT  
GIEGLKPNKKQPVVNKSIVRRSDSRNLEPRRRRENKSRRTTNDSSAASESPPPRLKTNSYGGKDRGEDEE  
SRERMASEVTNNKGNLEDRCLSCGKNPVSFHPLFEGGLCQSCRDRFLELFYMYDEDGYQSYCTVCCEGR  
ELLCSNTSCRCFCVECLEVLVAGTAEDAKLQEPWSCYMCLPQRCHGVLRRRKDWNMRLQDFFTTDPD  
LEEFQEPKLYPAIPAAKRRPIRVL SFDGIATGYLVKELGIKVEKYIASEVCAESIAGTVKHEGQIK  
YVNDVRKITKKNIEEWGPFDLVIGGSPCNDLSNVNPARKGLYEGTGRLFFEFYHLLNYTRPKEGDNRPFF  
WMFENVVAMKVNDKKDISRFLACNPVMIDAIVKSAHRARYFWGNLPGMNRPMASKNDKLELQDCLEFS  
RTAKLKKVQTITTKSNSIRQGNQLFPVVMNGKDDVLWCTELERIFGFPAHYTDVSNMGRGARQKLLGRS  
WSVPVIRHLFAPLKDYFACE

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



<b>ACCN:</b>	NM_001122997
<b>ORF Size:</b>	2580 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<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_001122997.1</a> , <a href="#">NP_001116469.1</a>
<b>RefSeq Size:</b>	4229 bp
<b>RefSeq ORF:</b>	2583 bp
<b>Locus ID:</b>	13436
<b>Cytogenetics:</b>	2 H1
<b>Gene Summary:</b>	<p>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 results in severe developmental defects and loss of viability. Mutation of the related gene in humans causes immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. There is a pseudogene for this gene located adjacent to this gene in the same region of chromosome 2. Alternatively spliced transcript variants encoding multiple isoforms have been observed. [provided by RefSeq, Nov 2012]</p>