

Product datasheet for **RG234785**

DNMT3B (NM_001207055) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNMT3B (NM_001207055) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DNMT3B
Synonyms:	ICF; ICF1; M.HsallIB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG234785 representing NM_001207055
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGGGAGACACCAGGCATCTCAATGGAGAGGAGGACGCCGGGGAGGGAAGACTCGATCCTCGTCA
 ACGGGGCCTGCAGCGACCAGTCCTCCGACTCGCCCCAATCCTGGAGGCTATCCGCACCCCGGAGATCAG
 AGGCCGAAGATCAAGCTCGCGACTCTCCAAGAGGGAGGTGCCAGTCTGCTAAGCTACACACAGGACTTG
 ACAGGCGATGGCGACGGGAAGATGGGGATGGCTCTGACACCCAGTCATGCCAAAGCTCTCCGGGAAA
 CCAGGACTCGTTCAGAAAGCCAGCTTCCCTGAGACGGCGGCAACAGCATCGGCAGGAACGCCATGGCC
 GTCCCTCCAGCTTTACCTTACCATCGACCTCACAGACGACACAGAGGACACACATGGGACGCCCCAG
 AGCAGCAGTACCCCTACGCCGCCTAGCCAGGACAGCCAGCAGGGGGCATGGAGTCCCCGAGGTGG
 AGGCAGACAGTGGAGATGGAGACAGTTCAGAGTATCAGGATGGGAAGGAGTTTGGAAAGGGACCTCGT
 GTGGGAAAGATCAAGGGCTTCTCTGGTGGCCGCCATGGTGGTGTCTTGAAGGCCACCTCCAAGCGA
 CAGGCTATGTCTGGCATGCGGTGGTCCAGTGGTTTGGCGATGGCAAGTTCTCCGAGGTCTCTGCAGACA
 AACTGGTGGCACTGGGGCTGTTACGCCAGCACTTAATTTGGCCACCTTCAATAAGCTCGTCTCCTATCG
 AAAAGCCATGTACCATGCTCTGGAGAAAGCTAGGGTGGGAGCTGGCAAGACCTTCCCCAGCAGCCCTGGA
 GACTCATTGGAGGACCAGCTGAAGCCCATGTTGGAGTGGGCCACGGGGGCTTCAAGCCCACTGGGATCG
 AGGGCCTCAAACCAACAACACGCAACCAGAGAACAAGACTCGAAGACGCACAGCTGACGACTCAGCCAC
 CTCTGACTACTGCCCCGACCCAAGCGCCTCAAGACAAATTGCTATAACAACGGCAAAGACCGAGGGGAT
 GAAGTACAGAGCCGAGAACAATGGCTTCAGATGTTGCCAACAACAAGAGCAGCCTGGAAGATGGCTGTT
 TGTCTTGTGGCAGGAAAAACCCCGTGCCTTCCACCCTCTTTTGGAGGGGGCTCTGTGCAGATGCCG
 GGATCGCTTCCCTTGAGCTGTTTTACATGTATGATGACGATGGCTATCAGTCTTACTGCAGTGTGTGCTGC
 GAGGGCCGAGAGCTGCTGCTTTCAGCAACACGAGCTGCTGCCGGTGTCTGTGTGGAGTGCCTGGAGG
 TGCTGGTGGGCACAGGCACAGCGGCCGAGGCCAAGCTTCAGGAGCCCTGGAGCTGTTACATGTGTCTCCC
 GCAGCGCTGTCATGGCGTCTGCGGCGCCGGAAGGACTGGAACGTGCGCCTGCAGGCCTTCTTACCAGT
 GACACGGGGCTTGAATATGAAGCCCCAAGCTGTACCCTGCCATTCGCCGAGCCCGAAGGCGGCCCATTC
 GAGTCTGTCTTGTGTTGATGGCATCGCGACAGGCTACCTAGTCTCAAAGAGTTGGGCATAAAGGTAGG
 AAAGTACGTGCTTCTGAAGTGTGTGAGGAGTCCATTGCTGTTGGAACCGTGAAGCACGAGGGGAATATC
 AAATACGTGAACGACGTGAGGAACATCACAAAGAAAAATTGAAGAATGGGGCCATTTGACTTGGTGA
 TTGGCGGAAGCCCATGCAACGATCTCTCAAATGTGAATCCAGCCAGGAAAGGCCTGTATGAGGGTACAGG
 CCGGCTCTTCTTGAATTTTACCACCTGCTGAATTAAGTACTCACGCCCAAGGAGGGTGTGACCGGCCGTTT
 TTCTGGATGTTTGAAGTGTGTAGCCATGAAGGTTGGCGACAAGAGGGACATCTCACGGTCTCTGGAGT
 GTAATCCAGTGTGATTGATGCCATCAAAGTTTCTGCTGCTCACAGGGCCCGATACTTCTGGGGCAACCT
 ACCCGGGATGAACAGGATCTTTGGCTTCTGTGCACTACACAGACGTGTCCAACATGGGCCGTGGTGC
 CGCCAGAAGCTGCTGGGAAGTCTGGAGCGTGCCTGTATCCGACACCTCTCGCCCTCTGAAGGACT
 ACTTTGCATGTAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG234785 representing NM_001207055
Red=Cloning site Green=Tags(s)

```

MKGDTRHLNGEEDAGGREDSSILVNGACSDQSSDSPPILEAIRTPEIRGRSSSRLSKREVSSLLSYTQDL
TGDGDGEDGDGSDTPVMPKLFRETRTRSESPASLRRRATASAGTPWSPSSYL TIDLDDTEDTHGTPQ
SSSTPYARLAQDSQQGME SPQVEADSGDGSSEYQDGKEFGIGDLVWGKIKGFSWWPAMVVSWKATSKR
QAMSGMRWVQWFGDGKFSEVSADKLVALGLFSQHFNLATFNKLVSYRKAMYHALEKARVRAGKTFPSSPG
DSLEDQLKPMLEWAHGGFKPTGIEGLKPNNTQPENKTRRRRTADDSATSDYCPAPKRLKTNCYNNGKDRGD
EDQSREQMASDVANNKSSLEDGCLSCGRKNPVSFHPLFEGGLCQTCRDRFLELFYMYDDDGYSYCTVCC
EGRELLLCNSNTSCRCFCVECLEVLVGTGTAAEAKLQEPWSCYMCLPQRCHGVLRRRKNWVRLQAFFTS
DTGLEYEAPKLYAIPAARRRPIRVLSLFDGIATGYLVLKELGIKVGKYVASEVCEESIAGTVKHGNI
KYVNDVRNITKKNIEEWGPFDLVIGGSPCNLSNVNPARKGLYEGTGRLFFEFYHLLNYSRPKEGDDRRPF
FWMFENVVAMKVGDKRDISRFLECNPVMIDAIVKSAHRARYFWGNLPGMNRIFGFPVHYTDVSNMGRGA
RQKLLGRSWSVPVIRHLFAPLKDYFACE
    
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001207055

ORF Size: 2184 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_001207055.2](#)

RefSeq Size: 3978 bp

RefSeq ORF: 2187 bp

Locus ID: 1789

UniProt ID: [Q9UBC3](#)

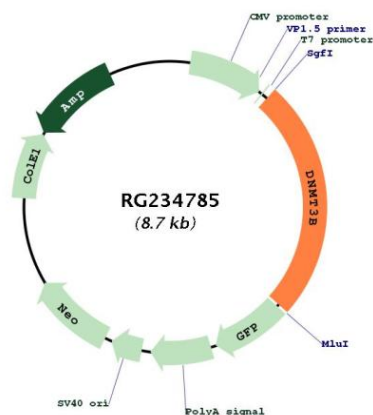
Cytogenetics: 20q11.21

Protein Families: Druggable Genome, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency

Protein Pathways: Cysteine and methionine metabolism, Metabolic pathways

Gene Summary: CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in this gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. Eight alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined. [provided by RefSeq, May 2011]

Product images:



Circular map for RG234785

