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# Product datasheet for SC309490

## DNMT3B (NM_175849) Human Untagged Clone

### Product data:

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| **Product Type:** | Expression Plasmids |
| **Product Name:** | DNMT3B (NM_175849) Human Untagged Clone |
| **Tag:** | Tag Free |
| **Symbol:** | DNMT3B |
| **Synonyms:** | ICF; ICF1; M.HsaIIIB |
| **Vector:** | pCMV6 series |



View online »

**Fully Sequenced ORF:**

>NCBI ORF sequence for NM_175849, the custom clone sequence may differ by one or more nucleotides

ATGAAGGGAGACACCAGGCATCTCAATGGAGAGGAGGACGCCGGCGGGAGGGAAGACTCG
ATCCTCGTCAACGGGGCCTGCAGCGACCAGTCCTCCGACTCGCCCCCAATCCTGGAGGCT
ATCCGCACCCCGGAGATCAGAGGCCGAAGATCAAGCTCGCGACTCTCCAAGAGGGAGGTG
TCCAGTCTGCTAAGCTACACACAGGACTTGACAGGCGATGGCGACGGGGAAGATGGGGAT
GGCTCTGACACCCCAGTCATGCCAAAGCTCTTCCGGGAAACCAGGACTCGTTCAGAAAGC
CCAGCTGTCCGAACTCGAAATAACAACAGTGTCTCCAGCCGGGAGAGGCACAGGCCTTCC
CCACGTTCCACCCGAGGCCGGCAGGGCCGCAACCATGTGGACGAGTCCCCCGTGGAGTTC
CCGGCTACCAGGTCCCTGAGACGGCGGGCAACAGCATCGGCAGGAACGCCATGGCCGTCC
CCTCCCAGCTCTTACCTTACCATCGACCTCACAGACGACACAGAGGACACACATGGGACG
CCCCAGAGCAGCAGTACCCCCTACGCCCGCCTAGCCCAGGACAGCCAGCAGGGGGGCATG
GAGTCCCCGCAGGTGGAGGCAGACAGTGGAGATGGAGACAGTTCAGAGTATCAGGATGGG
AAGGAGTTTGGAATAGGGGACCTCGTGTGGGGAAAGATCAAGGGCTTCTCCTGGTGGCCC
GCCATGGTGGTGTCTTGGAAGGCCACCTCCAAGCGACAGGCTATGTCTGGCATGCGGTGG
GTCCAGTGGTTTGGCGATGGCAAGTTCTCCGAGGTCTCTGCAGACAAACTGGTGGCACTG
GGGCTGTTCAGCCAGCACTTTAATTTGGCCACCTTCAATAAGCTCGTCTCCTATCGAAAA
GCCATGTACCATGCTCTGGAGAAAGCTAGGGTGCGAGCTGGCAAGACCTTCCCCAGCAGC
CCTGGAGACTCATTGGAGGACCAGCTGAAGCCCATGTTGGAGTGGGCCCACGGGGGCTTC
AAGCCCACTGGGATCGAGGGCCTCAAACCCAACAACACGCAACCAGAGAACAAGACTCGA
AGACGCACAGCTGACGACTCAGCCACCTCTGACTACTGCCCCGCACCCAAGCGCCTCAAG
ACAAATTGCTATAACAACGGCAAAGACCGAGGGGATGAAGATCAGAGCCGAGAACAAATG
GCTTCAGATGTTGCCAACAACAAGAGCAGCCTGGAAGATGGCTGTTTGTCTTGTGGCAGG
AAAAACCCCGTGTCCTTCCACCCTCTCTTTGAGGGGGGGCTCTGTCAGACATGCCGGGAT
CGCTTCCTTGAGCTGTTTTACATGTATGATGACGATGGCTATCAGTCTTACTGCACTGTG
TGCTGCGAGGGCCGAGAGCTGCTGCTTTGCAGCAACACGAGCTGCTGCCGGTGTTTCTGT
GTGGAGTGCCTGGAGGTGCTGGTGGGCACAGGCACAGCGGCCGAGGCCAAGCTTCAGGAG
CCCTGGAGCTGTTACATGTGTCTCCCGCAGCGCTGTCATGGCGTCCTGCGGCGCCGGAAG
GACTGGAACGTGCGCCTGCAGGCCTTCTTCACCAGTGACACGGGGCTTGAATATGAAGCC
CCCAAGCTGTACCCTGCCATTCCCGCAGCCCGAAGGCGGCCCATTCGAGTCCTGTCATTG
TTTGATGGCATCGCGACAGGCTACCTAGTCCTCAAAGAGTTGGGCATAAAGGTAGGAAAG
TACGTCGCTTCTGAAGTGTGTGAGGAGTCCATTGCTGTTGGAACCGTGAAGCACGAGGGG
AATATCAAATACGTGAACGACGTGAGGAACATCACAAAGAAAAATATTGAAGAATGGGGC
CCATTTGACTTGGTGATTGGCGGAAGCCCATGCAACGATCTCTCAAATGTGAATCCAGCC
AGGAAAGGCCTGTATGAGGGTACAGGCCGGCTCTTCTTCGAATTTTACCACCTGCTGAAT
TACTCACGCCCCAAGGAGGGTGATGACCGGCCGTTCTTCTGGATGTTTGAGAATGTTGTA
GCCATGAAGGTTGGCGACAAGAGGGACATCTCACGGTTCCTGGAGTGTAATCCAGTGATG
ATTGATGCCATCAAAGTTTCTGCTGCTCACAGGGCCCGATACTTCTGGGGCAACCTACCC
GGGATGAACAGGATCTTTGGCTTTCCTGTGCACTACACAGACGTGTCCAACATGGGCCGT
GGTGCCCGCCAGAAGCTGCTGGGAAGGTCCTGGAGCGTGCCTGTCATCCGACACCTCTTC
GCCCCTCTGAAGGACTACTTTGCATGTGAATAG

**Restriction Sites:** Please inquire

**ACCN:** NM_175849

**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).

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| **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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_175849.1, NP_787045.1 |
| **RefSeq Size:** | 4104 bp |
| **RefSeq ORF:** | 2313 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]<br>Transcript Variant: This variant (3) lacks three exons in the coding region but maintains the reading frame, compared to variant 1. Isoform 3 is shorter than isoform 1. |