OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC124706

DNMT3B (NM_175848) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNMT3B (NM_175848) Human Untagged Clone
Tag:	Tag Free
Symbol:	DNMT3B
Synonyms:	ICF; ICF1; M.HsaIIIB
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF: >NCBI ORF sequence for NM_175848, the custom clone sequence may differ by one or more nucleotides

ATGAAGGGAGACACCAGGCATCTCAATGGAGAGGAGGACGCCGGCGGGAGGGAAGACTCGATCCTCGTCA
ACGGGGCCTGCAGCGACCAGTCCTCCGACTCGCCCCCAATCCTGGAGGCTATCCGCACCCCGGAGATCAG
AGGCCGAAGATCAAGCTCGCGACTCTCCAAGAGGGAGGTGTCCAGTCTGCTAAGCTACACACAGGACTTG
ACAGGCGATGGCGACGGGGAAGATGGGGATGGCTCTGACACCCCAGTCATGCCAAAGCTCTTCCGGGAAA
CCAGGACTCGTTCAGAAAGCCCAGCTGTCCGAACTCGAAATAACAACAGTGTCTCCAGCCGGGAGAGGCA
CAGGCCTTCCCCACGTTCCACCCGAGGCCGGCAGGGCCGCAACCATGTGGACGAGTCCCCCGTGGAGTTC
CCGGCTACCAGGTCCCTGAGACGGCGGGCAACAGCATCGGCAGGAACGCCATGGCCGTCCCCTCCCAGCT
CTTACCTTACCATCGACCTCACAGACGACACAGAGGACACACATGGGACGCCCCAGAGCAGCAGTACCCC
CTACGCCCGCCTAGCCCAGGACAGCCAGCAGGGGGGCATGGAGTCCCCGCAGGTGGAGGCAGACAGTGGA
GATGGAGACAGTTCAGAGTATCAGGATGGGAAGGAGTTTGGAATAGGGGACCTCGTGTGGGGAAAGATCA
AGGGCTTCTCCTGGTGGCCCGCCATGGTGGTGTCTTGGAAGGCCACCTCCAAGCGACAGGCTATGTCTGG
CATGCGGTGGGTCCAGTGGTTTGGCGATGGCAAGTTCTCCGAGGTCTCTGCAGACAAACTGGTGGCACTG
GGGCTGTTCAGCCAGCACTTTAATTTGGCCACCTTCAATAAGCTCGTCTCCTATCGAAAAGCCATGTACC
ATGCTCTGGAGAAAGCTAGGGTGCGAGCTGGCAAGACCTTCCCCAGCAGCCCTGGAGACTCATTGGAGGA
CCAGCTGAAGCCCATGTTGGAGTGGGCCCACGGGGGCTTCAAGCCCACTGGGATCGAGGGCCTCAAACCC
AACAACACGCAACCAGAGAACAAGACTCGAAGACGCACAGCTGACGACTCAGCCACCTCTGACTACTGCC
CCGCACCCAAGCGCCTCAAGACAAATTGCTATAACAACGGCAAAGACCGAGGGGATGAAGATCAGAGCCG
AGAACAAATGGCTTCAGATGTTGCCAACAACAAGAGCAGCCTGGAAGATGGCTGTTTGTCTTGTGGCAGG
AAAAACCCCGTGTCCTTCCACCCTCTCTTTGAGGGGGGGCTCTGTCAGACATGCCGGGATCGCTTCCTTG
AGCTGTTTTACATGTATGATGACGATGGCTATCAGTCTTACTGCACTGTGTGCTGCGAGGGCCGAGAGCT
GCTGCTTTGCAGCAACACGAGCTGCTGCCGGTGTTTCTGTGTGGAGTGCCTGGAGGTGCTGGTGGGCACA
GGCACAGCGGCCGAGGCCAAGCTTCAGGAGCCCTGGAGCTGTTACATGTGTCTCCCGCAGCGCTGTCATG
GCGTCCTGCGGCGCCGGAAGGACTGGAACGTGCGCCTGCAGGCCTTCTTCACCAGTGACACGGGGCTTGA
ATATGAAGCCCCCAAGCTGTACCCTGCCATTCCCGCAGCCCGAAGGCGGCCCATTCGAGTCCTGTCATTG
TTTGATGGCATCGCGACAGGCTACCTAGTCCTCAAAGAGTTGGGCATAAAGGTAGGAAAGTACGTCGCTT
CTGAAGTGTGTGAGGAGTCCATTGCTGTTGGAACCGTGAAGCACGAGGGGAATATCAAATACGTGAACGA
CGTGAGGAACATCACAAAGAAAAATATTGAAGAATGGGGCCCATTTGACTTGGTGATTGGCGGAAGCCCA
TGCAACGATCTCTCAAATGTGAATCCAGCCAGGAAAGGCCTGTATGAGGGTACAGGCCGGCTCTTCTTCG
AATTTTACCACCTGCTGAATTACTCACGCCCCAAGGAGGGTGATGACCGGCCGTTCTTCTGGATGTTTGA
GAATGTTGTAGCCATGAAGGTTGGCGACAAGAGGGACATCTCACGGTTCCTGGAGTGTAATCCAGTGATG
ATTGATGCCATCAAAGTTTCTGCTGCTCACAGGGCCCGATACTTCTGGGGCAACCTACCCGGGATGAACA
GGCCCGTGATAGCATCAAAGAATGATAAACTCGAGCTGCAGGACTGCTTGGAATACAATAGGATAGCCAA
GTTAAAGAAAGTACAGACAATAACCACCAAGTCGAACTCGATCAAACAGGGGAAAAACCAACTTTTCCCT
GTTGTCATGAATGGCAAAGAAGATGTTTTGTGGTGCACTGAGCTCGAAAGGATCTTTGGCTTTCCTGTGC
ACTACACAGACGTGTCCAACATGGGCCGTGGTGCCCGCCAGAAGCTGCTGGGAAGGTCCTGGAGCGTGCC
TGTCATCCGACACCTCTTCGCCCCTCTGAAGGACTACTTTGCATGTGAATAG

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_175848 unedited
TTGTATACGACTCACTATAGGCGGCCGCGAATTCGCACGAGGCGGAGATTCGCGAGCCCA
GCGCCCTGCACGGCCGCCAGCCGGCCTCCCGCCAGCCAGCCCCGACCCGCGGCTCCGCCG
CCCAGCCGCGCCCCAGCCAGCCCTGCGGCAGGAAAGCATGAAGGGAGACACCAGGCATCT
CAATGGAGAGGAGGACGCCGGCGGGAGGGAAGACTCGATCCTCGTCAACGGGGCCTGCAG
CGACCAGTCCTCCGACTCGCCCCCAATCCTGGAGGCTATCCGCACCCCGGAGATCAGAGG
CCGAAGATCAAGCTCGCGACTCTCCAAGAGGGGAGGTGTCCAGTCTGCTAAGCTACACAC
AGGACTTGACAGGCGATGGCGACGGGAAAGGGNNGGAATGGCTCTGACACCCCAGTCATG
CCAAAGCTCTTCCGGGAAACCAGGACTCGTTCAGAAAGCCCAGCTTCCCTGAGACGGCGG
GCAACAGCATCGGCAGGAACGCCATGGGCCGTCCCCTCCCAGCTCTTACCTTACCATCGA
CCTCACAGACGACACAGAGGACACACATGGGACGCCCCAGAGCAGCAGTACCCCCTACGC
CCGCCTAGCCCAGGACAGCCAGCAAGGGGGGCATGGAGCCCCCGCAGGTGGAGGCAGACA
GTGGGAGATGAAAACAGTTCAAAGATCAGGATGGGAAAGGGATTTGGAATTAGGGGACCC
TGTGTGGGGAAAAGAACAAGGGCTTCTCTTGGTGGCCCCCTGTTGGGGGTCTTGAAAAGC
CCCTCCCAACCAAAGGCTTTGTTTGCTTTCCGGGGGTCCANNTGTTTTGGNNATGCAATT
TTTCCAGGTTTTTNNAACAAATTGTGGCCTGGGGNTTTTTTACCCCCATTTTTTTTNGCA
CTCA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_175848 unedited
TGGACCGCGGCACGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTAAACAA
ATACTGATTTTAATTAAACATAAGGTAAACTCTAGGCATCCGTCATCTTTCAGCCTAAAA
ATTAGCAAAAACTGTTGAAACAAGGCACAGTTTTTTCCCCATATTTGTTACGTCGTGGCT
CCAGTTACAAAAAAATTTTAATGAAAACGTTAAACATAAAAATAGAAGTTTGAGATTTTA
AAAAGTGTATAAAAAGCCCCACAAAACTTGTCAACGTTGTTCCTTATTCTACAAAATAGC
ACCAGTAAGAAGAGTAAAAGGTGTTAAAAACCATTATGACAGCATTTCTGAAATGCAGCT
TGTCTGAATTCCCGTTCTCCCTAAAAACGACTTCTTATGGAATAAAAAAGGATTAAAAAA
TCTCCAAAGGGAGCACCGAGCTTTGCAGTTTTCCCTGTCATCTCTCAGATGTGGGGAAGG
TATGAGAAATGTATGTCTGTCCCTGACTGCTGTCACTGCCTCTGAGTTTAGTAAAAAGAT
GAGAAATGAGGGTAGCAGACTTCTCATCTGGGGACCTGTGCCTGTGGAGGGTAGGTCTCC
TGGAAGGGAATGGGTTGAGGGGGGGTTTTATCTAAGCTCTTGCTTTCACTCCTTTCTAGG
GAAGAGGAGATCCGGGGAGCCTTCCTGCCTTCAAAATATGGCGCGTTAATTTAGAACTGA
GACACCCTTGCCTGACCCCCAGAGGCTCTTTTGTATTACGCGGAGGTTATACCAAAAACG
CCCCTCTCCTTGACCTCGTGGGCAATCATTTTTTTTTTTCATTAACCCCTCATCGACAAA
CTCATTAGTCCGTCCATCCCCCCGCCTCCCCCCTCTTTCCCTCCTCCCTACTTTCGCTCC
CCCCCTCGTTTTCTCTTCCCCCACCTCTCCTTAGTCCCCCCCCCATCCCCTCCTTCCTCTC
CCCATTCA

Restriction Sites: NotI-NotI

ACCN: NM_175848

Insert Size: 4000 bp

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).

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_175848.1, NP_787044.1
RefSeq Size:	4293 bp
RefSeq ORF:	2502 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] Transcript Variant: This variant (2) lacks an in-frame exon in the coding region, compared to variant 1. Isoform 2 is shorter than isoform 1.