

Product datasheet for **RC219008**

DNMT3L (NM_175867) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNMT3L (NM_175867) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DNMT3L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219008 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCCATCCCAGCCCTGGACCCAGAGGCCGAGCCCAGCATGGACGTGATTTTGGTGGGATCCAGTG
AGCTCTCAAGCTCCGTTTCACCCGGGACAGGCAGAGATCTTATTGCATATGAAGTCAAGGCTAACCAGCG
AAATATAGAAGACATCTGCATCTGCTGCGGAAGTCTCCAGGTTACACACAGCACCCCTCTGTTTGAGGGA
GGGATCTGCGCCCATGTAAGGACAAGTTCCTGGATGCCCTCTCCTGTACGACGATGACGGGTACCAAT
CCTACTGCTCCATCTGCTGCTCCGGAGAGACGCTGCTCATCTGCGGAAACCCTGATTGCACCCGATGCTA
CTGCTTCGAGTGTGTGGATAGCCTGGTCGGCCCCGGGACCTCGGGGAAGGTGCACGCCATGAGCAACTGG
GTGTGCTACCTGTGCCTGCCCTCCTCCGAAGCGGGCTGCTGCAGCGTCGGAGGAAGTGGCGCAGCCAGC
TCAAGGCCTTCTACGACCGAGAGTCGGAGAATCCCTTGAGATGTTTCAAACCGTGCCTGTGTGGAGGAG
ACAGCCAGTCCGGGTGCTGTCCCTTTTGAAGACATCAAGAAAGAGCTGACGAGTTTGGGCTTTTGGAA
AGTGGTCTGACCCGGGACAACCTGAAGCATGTGGTTGATGTCACAGACACAGTGAGGAAGGATGTGGAGG
AGTGGGACCCTTCGATCTTGTGTACGGCGCCACACCTCCCTGGGCCACACCTGTGACCGTCTCCAG
CTGGTACCTGTTCCAGTTCACCGGCTCCTGCAGTACGCACGGCCCAAGCCAGGCAGCCCCGGGCCCTTC
TTCTGGATGTTCTGTGGACAATCTGGTGTGAACAAGGAAGACCTGGACGTGCGATCTCGCTTCTCGGAGA
TGGAGCCAGTACCATCCAGATGTCCACGGCGGATCCTTGCAGAATGCTGTCCGCGTGTGGAGCAACAT
CCCAGCCATAAGGAGCAGGCACTGGGCTCTGGTTTCGGAAGAAGAATTGTCCCTGCTGGCCAGAACAAG
CAGAGCTCGAAGCTCGCGGCCAAGTGGCCACCAAGCTGGTGAAGAAGTCTTTCTCCCCCTAAGAGAAT
ATTTCAAGTATTTTTCAACAGAACTCACTTCTCTTTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC219008 protein sequence
Red=Cloning site Green=Tags(s)

MAAIPALDPEAEPMSDVILVGSSELSSSVSPGTGRDLIAYEVKANQRNIEDICICCGSLQVHTQHPLFEG
 GICAPCKDKFLDALFLYDDDGYSYCSICCSGETLLICGNPDCTRCYCFECVDSL VGPVSGKVVHAMS
 VCYLCLPSSRSGLLQRRRKWRSQKAFYDRESENPLEMFETVPVWRRQPVRVLSLFEDIKKELTSLGFLE
 SGSDPQGLKHVVVDVTDVTRKDVVEEWGPFDLVYGATPPLGHTCDRPPSWYLFQFHRLLLQYARPKGSPGPF
 FWMFVDNLVNLKEDLDVASRFLMEPEVPTIPDVHGGSLQNAVVRVWSNIPAIRSRHWALVSEELSLLAQNK
 QSSKLAAKWPTKLVKNCFLPLREYFKYFSTELTSSL

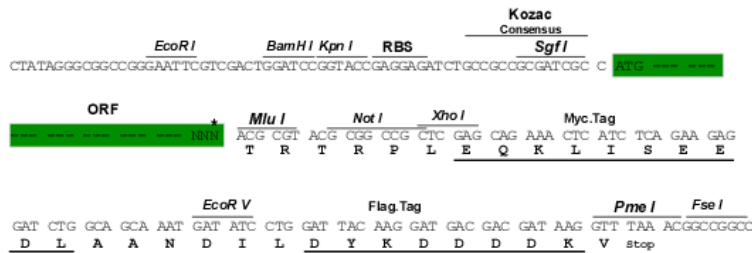
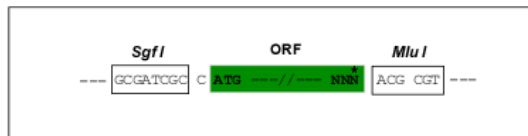
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6385_b05.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_175867

ORF Size: 1158 bp

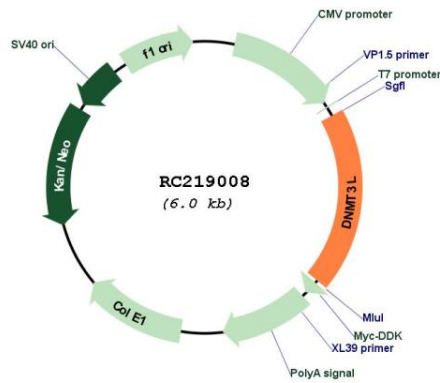
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

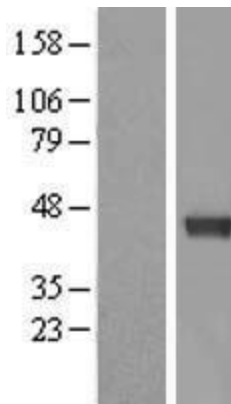
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_175867.3
RefSeq Size:	1720 bp
RefSeq ORF:	1161 bp
Locus ID:	29947
UniProt ID:	Q9UJW3
Cytogenetics:	21q22.3
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Cysteine and methionine metabolism, Metabolic pathways
MW:	43.5 kDa
Gene Summary:	<p>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 nuclear protein with similarity to DNA methyltransferases, but is not thought to function as a DNA methyltransferase as it does not contain the amino acid residues necessary for methyltransferase activity. However, it does stimulate de novo methylation by DNA cytosine methyltransferase 3 alpha and is thought to be required for the establishment of maternal genomic imprints. This protein also mediates transcriptional repression through interaction with histone deacetylase 1. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2012]</p>

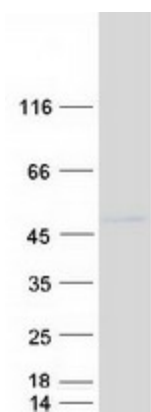
Product images:



Circular map for RC219008



Western blot validation of overexpression lysate (Cat# [LY406188]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219008 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DNMT3L protein (Cat# [TP319008]). The protein was produced from HEK293T cells transfected with DNMT3L cDNA clone (Cat# RC219008) using MegaTran 2.0 (Cat# [TT210002]).