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Product datasheet for RC223418

DNMT3B (NM_175849) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNMT3B (NM_175849) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DNMT3B
Synonyms:	ICF; ICF1; M.HsaIIIB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC223418 representing NM_175849
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGGGAGACACCAGGCATCTCAATGGAGAGGAGGACGCCGGCGGGAGGGAAGACTCGATCCTCGTCA
ACGGGGCCTGCAGCGACCAGTCCTCCGACTCGCCCCCAATCCTGGAGGCTATCCGCACCCCGGAGATCAG
AGGCCGAAGATCAAGCTCGCGACTCTCCAAGAGGGAGGTGTCCAGTCTGCTAAGCTACACACAGGACTTG
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CCAGGACTCGTTCAGAAAGCCCAGCTGTCCGAACTCGAAATAACAACAGTGTCTCCAGCCGGGAGAGGCA
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CCGGCTACCAGGTCCCTGAGACGGCGGGCAACAGCATCGGCAGGAACGCCATGGCCGTCCCCTCCCAGCT
CTTACCTTACCATCGACCTCACAGACGACACAGAGGACACACATGGGACGCCCCAGAGCAGCAGTACCCC
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GAATGTTGTAGCCATGAAGGTTGGCGACAAGAGGGACATCTCACGGTTCCTGGAGTGTAATCCAGTGATG
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GGATCTTTGGCTTTCCTGTGCACTACACAGACGTGTCCAACATGGGCCGTGGTGCCCGCCAGAAGCTGCT
GGGAAGGTCCTGGAGCGTGCCTGTCATCCGACACCTCTTCGCCCCTCTGAAGGACTACTTTGCATGTGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

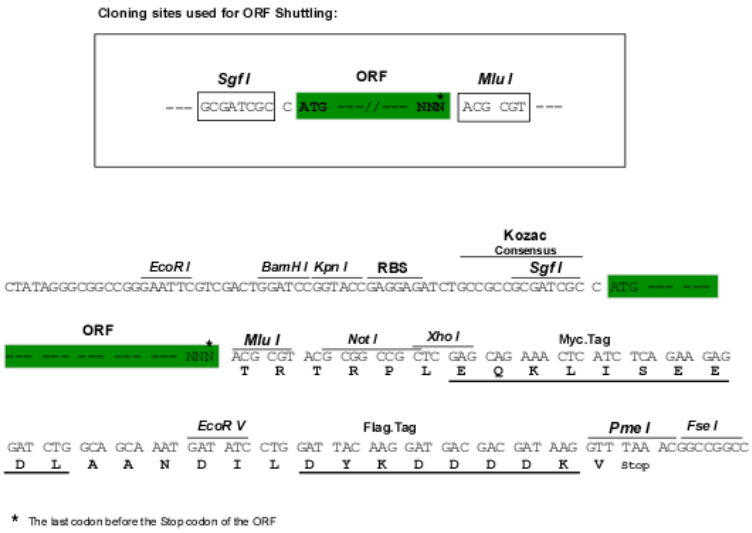
>RC223418 representing NM_175849
Red=Cloning site Green=Tags(s)

MKGDTRHLNGEEDAGGREDSILVNGACSDQSSDSPPILEAIRTPEIRGRRSSSRLSKREVSSLLSYTQDL
TGDGDGEDGDGSDTPVMPKLFRETRTRSESPAVRTRNNNSVSSRERHRPSPRSTRGRQGRNHVDESPVEF
PATRSLRRRATASAGTPWPSPPSSYLTIDLTDDTEDTHGTPQSSSTPYARLAQDSQQGGMESPQVEADSG
DGDSSEYQDGKEFGIGDLVWGKIKGFSWWPAMVVSWKATSKRQAMSGMRWVQWFGDGKFSEVSADKLVAL
GLFSQHFNLATFNKLVSYRKAMYHALEKARVRAGKTFPSSPGDSLEDQLKPMLEWAHGGFKPTGIEGLKP
NNTQPENKTRRRTADDSATSDYCPAPKRLKTNCYNNGKDRGDEDQSREQMASDVANNKSSLEDGCLSCGR
KNPVSFHPLFEGGLCQTCRDRFLELFYMYDDDGYQSYCTVCCEGRELLLCSNTSCCRCFCVECLEVLVGT
GTAAEAKLQEPWSCYMCLPQRCHGVLRRRKDWNVRLQAFFTSDTGLEYEAPKLYPAIPAARRRPIRVLSL
FDGIATGYLVLKELGIKVGKYVASEVCEESIAVGTVKHEGNIKYVNDVRNITKKNIEEWGPFDLVIGGSP
CNDLSNVNPARKGLYEGTGRLFFEFYHLLNYSRPKEGDDRPFFWMFENVVAMKVGDKRDISRFLECNPVM
IDAIKVSAAHRARYFWGNLPGMNRIFGFPVHYTDVSNMGRGARQKLLGRSWSVPVIRHLFAPLKDYFACE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_175849

ORF Size: 2310 bp

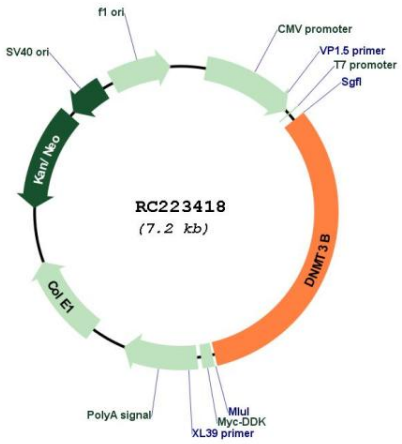
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

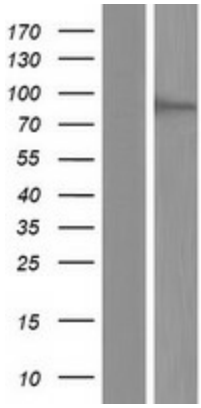
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_175849.2
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
MW:	86 kDa
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 RC223418



Western blot validation of overexpression lysate (Cat# [LY406229]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223418 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).