

Product datasheet for **RC213064**

DNMT3A (NM_022552) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNMT3A (NM_022552) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DNMT3A
Synonyms:	DNMT3A2; HESJAS; M.HsaIIIA; TBRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC213064 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCCGCATGCCCTCCAGCGGCCCGGGACACCAGCAGCTCTGCTGCGGAGCGGGAGGAGACCAGAA
 AGGACGGAGAGGAGCAGGAGGAGCCGCTGGCAAGGAGGAGCGCCAAGAGCCAGCACCAGGCACGGAA
 GGTGGGGCGGCCTGGGAGGAAGCGCAAGCACCCCCGGTGGAAAGCGGTGACACGCCAAAGGACCCTGCG
 GTGATCTCCAAGTCCCCATCCATGGCCCAGGACTCAGGCGCCTCAGAGCTATTACCCAATGGGGACTTGG
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 TGTGGCTACCACGCTGAGCCCGTGGGGTCCGATGCTGGGGACAAGAATGCCACCAAAGCAGGCGATGAC
 GAGCCAGAGTACGAGGACGGCCGGGGCTTTGGCATTGGGGAGCTGGTGTGGGGGAAACTGCGGGGCTTCT
 CCTGGTGGCCAGGCCGCATTGTGTCTTGGTGGATGACGGGCCGGAGCCGAGCAGCTGAAGCACCCGCTG
 GGTGATGTGGTTCGGAGACGGCAAATCTCAGTGGTGTGTGTTGAGAAGCTGATGCCGCTGAGCTCGTTT
 TGCAGTGCCTCCAGCAGCCACGTACAACAAGCAGCCCATGTACCGCAAAGCCATCTACGAGTCTCTGC
 AGGTGGCCAGCAGCCGCGGGGAAGCTGTTCCGGTGTGCCACGACAGCGATGAGAGTGACATGCCAA
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 AGGAAGCCATCCGGGTGCTGTCTCTTTGATGGAATCGCTACAGGGCTCCTGGTGTGTAAGGACTTGG
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 TTCGATCTGGTATTGGGGCAGTCCCTGCAATGACCTCTCCATCGTCAACCCTGCTCGCAAGGGCCTCT
 ACGAGGGCACTGGCCGGCTCTTCTTTGAGTCTACCGCTCCTGCATGATGCGCGGCCCAAGGAGGGAGA
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 ACTGCTGGGCCGGTCATGGAGCGTGCCAGTCATCCGCACCTCTCGCTCCGCTGAAGGAGTATTTTGGC
 TGTGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RC213064 protein sequence
 Red=Cloning site Green=Tags(s)

MPAMPSSGPGDTSSSAAEREEDRKDGEEQEPRGKEERQEPSTTARKVGRPGRKRKHPVVEGSDTPKDPA
 VISKSPSMAQDSGASELLPNGDLEKRSEPQPEEGSPAGGQKGGAPAEGEAAETLPEASRAVENGCCTPK
 EGRGAPAEAGKEQKETNIESMKMEGSRGRLRGGLGWESSLRQRPMPRLTFQAGDPYYISKRKRDEWLARW
 KREAEEKAKVIAGMNAVEENQGPGESQKVEEASPPAVQQPTDPA SPTVATTPPEPVGSDAGDKNATKAGDD
 EPEYEDGRGFGIGELVWGKLRGFSWWPGRIVSWWMTGRSRAAEGTRWVMWFGDGKFSVVCVEKLMPLSSF
 CSAFHQATYNKQPMYRKAIYEVLVQVASSRAGKLFVCHDSDESDTAKAVEVQNKPMIEWALGGFQPSGPK
 GLEPPEEEKNPYKEVYTDMWVEPEAAAAYPPPPAKKPRKSTAEKPKVKEIIDERTRELRVYEVQRKCRNI
 EDICISCGSLNVTLEHPLFVGGMCQCNKNCFLCAYQYDDDGYSYCTICCGGREVLMCGNHNCCRCFCV
 ECVDLLVGPAAQAAIKEDPWNCYMGHKGTYGLLRREDWPSRLQMFFANNHDQEFDPKVVYPPVPAEK
 RKP IRVLSLFDGIATGLLVKDLGIQVDRIYIASEVCEDSITVGMVRHQGKIMYVGDVRSVTQKHIQEWGP
 FDLVIGGSPCNDLSIVNPARKGLYEGTGRLFFEFYRLLHDARPKEGDDRPFFWL FENVVAMGVSDKRDIS
 RFLSNPVMIDAKEVSAHRARYFWGNLPGMNRPLASTVNDKLELQECLHGRIAKFSKVRTITTRSNSI
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 CV

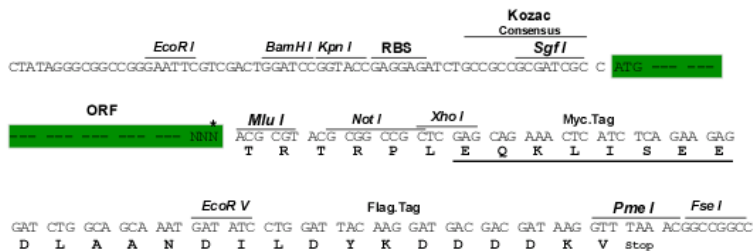
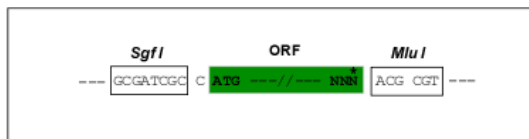
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6348_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



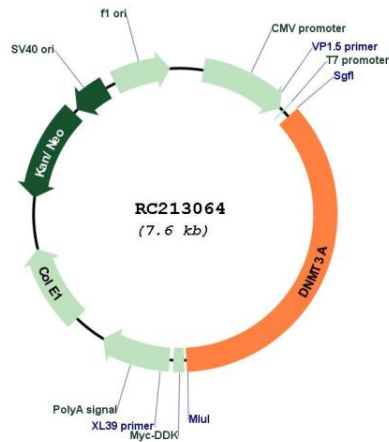
* The last codon before the Stop codon of the ORF

ACCN: NM_022552

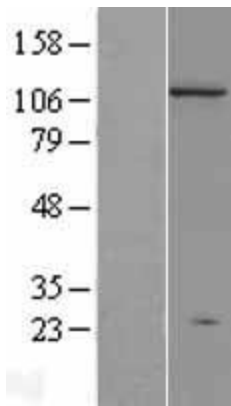
ORF Size: 2736 bp

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.
RefSeq:	NM_022552.5
RefSeq Size:	4324 bp
RefSeq ORF:	2739 bp
Locus ID:	1788
UniProt ID:	Q9Y6K1
Cytogenetics:	2p23.3
Protein Families:	Druggable Genome
Protein Pathways:	Cysteine and methionine metabolism, Metabolic pathways
MW:	101.9 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 that is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes to the cytoplasm and nucleus and its expression is developmentally regulated. [provided by RefSeq, Mar 2016]

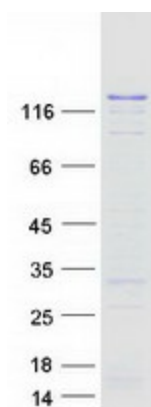
Product images:



Circular map for RC213064



Western blot validation of overexpression lysate (Cat# [LY411621]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213064 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DNMT3A protein (Cat# [TP313064]). The protein was produced from HEK293T cells transfected with DNMT3A cDNA clone (Cat# RC213064) using MegaTran 2.0 (Cat# [TT210002]).