

## Product datasheet for **MR212057L4V**

### **Dnmt1 (BC053047) Mouse Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Dnmt1 (BC053047) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Dnmt1
Synonyms:	Dnmt, MTase, Dnmt1o
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	BC053047
ORF Size:	4881 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR212057).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">BC053047.1</a>
RefSeq Size:	5249 bp
RefSeq ORF:	4883 bp
Locus ID:	13433
Cytogenetics:	9 7.66 cM



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**Gene Summary:**

This gene encodes a methyltransferase that preferentially methylates cytosines of CpG residues in hemimethylated DNA to generate fully methylated CpG base pairs during DNA replication. This enzyme plays roles in diverse cellular processes including cell cycle regulation, DNA repair, and telomere maintenance. The encoded protein is composed of an N-terminal domain with a nuclear localization sequence and replication fork-targeting domain, a DNA-binding CXXC domain, two bromo-adjacent homology domains, and a C-terminal catalytic domain. Mouse embryonic stem cells mutant for this gene are viable, but when introduced into the germ line, cause a recessive lethal phenotype with mutant embryos displaying stunted growth and developmental defects. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]