

## Product datasheet for **TR505922**

### Ehmt2 Mouse shRNA Plasmid (Locus ID 110147)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Ehmt2 Mouse shRNA Plasmid (Locus ID 110147)
Locus ID:	110147
Synonyms:	Bat8; D17Erttd710e; G9a; KMT1C; NG36
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Ehmt2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 110147). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001286573</a> , <a href="#">NM_001286575</a> , <a href="#">NM_145830</a> , <a href="#">NM_147151</a> , <a href="#">NM_147151.1</a> , <a href="#">NM_147151.2</a> , <a href="#">NM_145830.1</a> , <a href="#">NM_145830.2</a> , <a href="#">NM_001286575.1</a> , <a href="#">NM_001286573.1</a> , <a href="#">BC025539</a> , <a href="#">BC051494</a> , <a href="#">BC058357</a> , <a href="#">BC096670</a> , <a href="#">NM_001286575.2</a> , <a href="#">NM_001286573.2</a> , <a href="#">NM_147151.3</a> , <a href="#">NM_145830.3</a>
UniProt ID:	<a href="#">Q9Z148</a>
Summary:	Histone methyltransferase that specifically mono- and dimethylates 'Lys-9' of histone H3 (H3K9me1 and H3K9me2, respectively) in euchromatin. H3K9me represents a specific tag for epigenetic transcriptional repression by recruiting HP1 proteins to methylated histones. Also mediates monomethylation of 'Lys-56' of histone H3 (H3K56me1) in G1 phase, leading to promote interaction between histone H3 and PCNA and regulating DNA replication. Also weakly methylates 'Lys-27' of histone H3 (H3K27me). Also required for DNA methylation, the histone methyltransferase activity is not required for DNA methylation, suggesting that these 2 activities function independently. Probably targeted to histone H3 by different DNA-binding proteins like E2F6, MGA, MAX and/or DP1. May also methylate histone H1. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53. Also methylates CDYL, WIZ, ACIN1, DNMT1, HDAC1, ERCC6, KLF12 and itself.[UniProtKB/Swiss-Prot Function]



[View online »](#)

- shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
- For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).