

Product datasheet for **KN217851**

DNMT1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	DNMT1
Locus ID:	1786
Components:	<p>KN217851G1, DNMT1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGGCTGGGGCGGTACGCGC</p> <p>KN217851G2, DNMT1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TACCGCCTGCGGACATCGTC</p> <p>KN217851D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

```

AAAAAGGCAA CAAAAAACC CCCACACACT GGGTATAGAA GTGGCATGGG CCTCTATACA CTGTGAGATT
CTTGTTACTA GCTACAAATT CTGTGTATAC TCAAGATTTT CTAGAGTAGG TGCAATTACC CCGTTTTACA
GATGAGGACA CAGAGGCTGA GCCGTAGTGA CCCACCTAAG GTCGTATAGC CAGCAAATAG ATGGAGGTTG
GATTGGAAT GAGGACTTTA CTCAAGGGCT CTCACAAACC CTTGGGGGCT TCTCGTGTCT TTATCCCAT
CACACCTGAA AGAATGAATG AATGAATGCC TCGGGCACCG TGCCACCTC CCAGCAAACC GTGGAGCTTG
GACGAGCCCA CTGCTCCGCG TGGGGGGGGT GTGTGCCGCG CTTGCGCATG CGTGTTCCCT GGGCATGGCC
GGCTCCGTT CATCCTTCTG CACAGGGTAT CGCCTCTCTC CGTTTGGTAC ATCCCTCCT CCCCCACGCC
CGGACTGGGG TGGTAGACGC CGCCTCCGCT CATCGCCCT CCCATCGGT TTCCGCGCGA AAAGCCGGGG
CGCCTGCGCT GCCGCCGCG CGTCTGCTGA AGCCTCCGAG AACACGGACT CAGGGGGACA GGCAGGGCGC
TGGGTGGGGG GTCGTTCCC CTCGGGGTGG CCGGTGGCCG CTGCTGACAG ACGGGCGCGC ATGCGTGGGG
TGGTGC GGCG CGCAGCGGCA GTTGGCGCG GCAGGGTGGC ACTTCCGGTC GCGCGTGCCC GGGCTGTTT
GCGCCAAAT GGACCGTGA TTCCCCCTA GCTCCCTGGT GGCTAGAAAC TAGCGGGGT GGGGGTTCTC
TTTTGATCC CAAATACAG AAGCTTTGGG TTCGTTTCCG GGTCCCCTT CTTCAAGCAG CGGTGGGCCG
GGCTCTTGAC TCCAGCTTG TCGCACAGGA AGTGGGAGC CCGCGGCCAA CGGACACCCC TCGGGCACCG
GCACTTCGGC CTCCACTTCC GGTGTCCGGC CCGGTCCCCG GGGGCGCTTC TGTGGTGGGG GGTCCCTCAG
TGCTTTTCCC CCAAAGCTGT GCATCTCGAT GGCGGCCTCC AGAGACGGAT GTCACCCGTC GGGGCCTGGG
CTGGGCTGGC TCATGTTCCA GAGCCCAGCC TTCCGTGGGG TACTCATTCT GTCAGTTGGG ACTGTGTGGT
TCTTGCTCCT

```

GE100003, scramble sequence in pCas-Guide vector



[View online »](#)

Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq: [NM_001130823](#), [NM_001318730](#), [NM_001318731](#), [NM_001379](#)

UniProt ID: [P26358](#)

Synonyms: ADCADN; AIM; CXXC9; DNMT; HSN1E; m.Hsal; MCMT

Summary: This gene encodes an enzyme that transfers methyl groups to cytosine nucleotides of genomic DNA. This protein is the major enzyme responsible for maintaining methylation patterns following DNA replication and shows a preference for hemi-methylated DNA. Methylation of DNA is an important component of mammalian epigenetic gene regulation. Aberrant methylation patterns are found in human tumors and associated with developmental abnormalities. Variation in this gene has been associated with cerebellar ataxia, deafness, and narcolepsy, and neuropathy, hereditary sensory, type IE. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]

Product images:

