

Product datasheet for **SC308777**

EHMT2/G9A (EHMT2) (NM_025256) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EHMT2/G9A (EHMT2) (NM_025256) Human Untagged Clone
Tag:	Tag Free
Symbol:	EHMT2
Synonyms:	BAT8; C6orf30; G9A; GAT8; KMT1C; NG36
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC308777 representing NM_025256. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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TCTGAAGCTCAAGAGGTGACCATCCCCGGGGTGACGGGGTGACCCACCGGCCGCACTGCAGCTCCT
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 GTCAACACATGA
 ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI
Plasmid Map: □
ACCN: NM_025256
Insert Size: 3531 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_025256.6](#)

RefSeq Size: 3900 bp

RefSeq ORF: 3531 bp

Locus ID: 10919

UniProt ID: [Q96KQ7](#)

Cytogenetics: 6p21.33

Domains: SET, ANK, PreSET, Pre-SET

Protein Families: Druggable Genome

Protein Pathways: Lysine degradation

MW: 129 kDa

Gene Summary:

This gene encodes a methyltransferase that methylates lysine residues of histone H3. Methylation of H3 at lysine 9 by this protein results in recruitment of additional epigenetic regulators and repression of transcription. This gene was initially thought to be two different genes, NG36 and G9a, adjacent to each other in the HLA locus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]

Transcript Variant: This variant (3, also known as NG36/G9a-SPI) uses an alternate 5' UTR and 5' coding region and lacks an alternate in-frame exon compared to variant 3. It encodes isoform b, which has a shorter and distinct N-terminus and is shorter compared to isoform c.