

Product datasheet for RC224625

EHMT2/G9A (EHMT2) (NM_006709) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EHMT2/G9A (EHMT2) (NM_006709) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EHMT2/G9A
Synonyms:	BAT8; C6orf30; G9A; GAT8; KMT1C; NG36
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224625 representing NM_006709 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGCGGGCGGGAGCTGCAGCGCGCGGCCGCCAGGGGGAGGCCCCCGCTGAGATGGGGCGC
TGCTGCTGGAGAAGAAACCAGAGGAGCCACCGAGAGTTTCATGGCTCTTTGGGGACACCCCTCGTAG
TGAAGAAACCTGCCAAGGCCACCCCGACTCCCTGGAGCTGTGGCCCTCATCTCCAGCCTGTGC
ACTGTCCTGTTGGTGTAGAGGGGCTGACACCCCTGTAGGGCTACACCACTCATTGGGGTGAATCTG
AGAATCTTGAGGGAGATGGGACCTCCGTGGGGCCGGATCCTGTGGCCATGCCACAAAGTCATTC
CTCTTCCCCAGCAAGGGGGTTCTGTCTAGCCGGCCAAGATGTCAATGACAGGGCGGGAAAATCA
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CACCACTGCTGCCCGGGCTGCGGCTACTTCTGCACGGCGGGCACCTTCCTGGAGTGCCACCCTGACTTCC
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ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC224625 representing NM_006709
Red=Cloning site Green=Tags(s)

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 PPSVQSLAMRLLSMPGAQAAAAGSEPPATTSPGQPKVHRARKTMSKPGNGQPPVPEKRPPEIQHFRM
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 VGNRAIRTEKIIICRDVARGYENVPICVNGVDGEPCEYKISENCETSTMNIDRNITHLQHCTCVDDC
 SSSNCLCGQLSIRCWYDKGRLLQEFNKIEPPLIFECNQACSWRNCKNRVVQSGIKVRLQLYRTAKMGW
 GVRALQTIQGTGICEYVGELEISDAEADVREDDSYLFDLNDKDGVEYCIDARYYGNISRFINHLCDPNII
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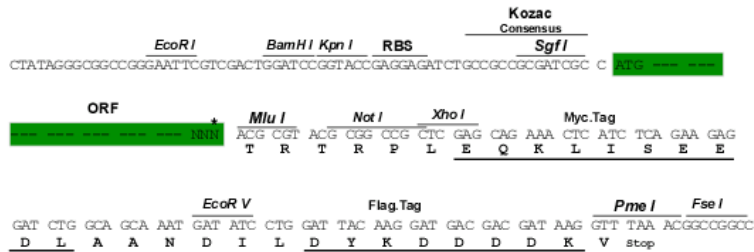
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



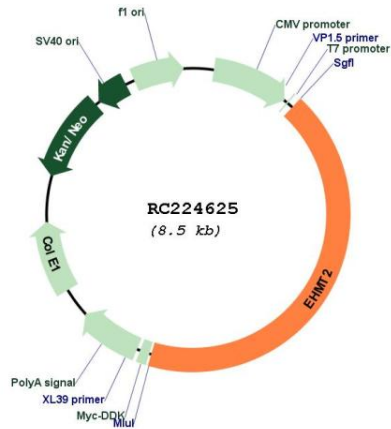
* The last codon before the Stop codon of the ORF

ACCN: NM_006709

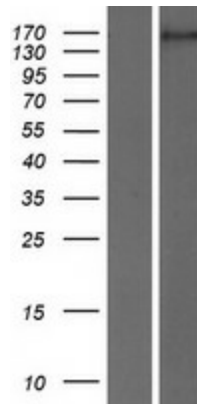
ORF Size: 3630 bp

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_006709.5
RefSeq Size:	3994 bp
RefSeq ORF:	3633 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:	132.2 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]

Product images:



Circular map for RC224625



Western blot validation of overexpression lysate (Cat# [LY416468]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224625 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).