

## Product datasheet for **RG240065**

### **EHMT2/G9A (EHMT2) (NM\_001289413) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EHMT2/G9A (EHMT2) (NM_001289413) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EHMT2/G9A
Synonyms:	BAT8; C6orf30; G9A; GAT8; KMT1C; NG36
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG240065 representing NM_001289413. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGCGGGGTCTACCGAGAGGGAGGGGGTTGATGCGGGCCCGGGGAGGGGTCTGCGGCCCTCCGGGC
AGCCGAGGCCCGGAAGGGGGGGCCCCACAGAGGAAGAGGTAGGCCCGGAGCCTACTCTCTTCCC
AGGGCCAGGCATCCTGGACCCCACTCTACTGGGCTGACCAGCCCTCTGTCCCTGTCTCCCC
TCCAGGGGGAGGCCCGCTGAGATGGGGCGCTGCTGCTGGAGAAGGAAACCAGAGGAGCCACCGAG
AGATTTCATGGCTCTTTGGGGACACCCCTCGTAGTGAAGAAACCCTGCCAAGGCCACCCCGACTCC
CTGGAGCTGCTGGCCCTCATCTCCAGCTCTGTCACTGTCACTGTTGGTGATGAGGGGCTGACACC
CCTGTAGGGGCTACACCACTCATTGGGGATGAATCTGAGAATCTTGAGGGAGATGGGGACCTCCGTGGG
GGCCGGATCCTGCTGGGCCATGCCACAAAGTCATTCGCCCTCTTCCCCAGCAAGGGGGTTCTGTCTCT
AGCCGGGCCAAGATGTCAATGACAGGGGCGGAAAATCACCTCCAATCTGTCCAGAGTTTGGCTATGAGG
CTACTGAGTATGCCAGGAGCCAGGGAGCTGCAGCAGCAGGGTCTGAACCCCTCCAGCCACCACGAGC
CCAGAGGGACAGCCCAAGGTCCACCGAGCCCGCAAACCATGTCCAAACCAGGAAATGGACAGCCCCG
GTCCCTGAGAAGCGGCCCTGAAATACAGCATTTCCGCATGAGTGATGATGTCCACTCACTGGGAAAG
GTGACCTCAGATCTGGCCAAAAGGAGGAAGCTGAACTCAGGAGGTGGCCTGTGAGAGGAGTTAGGTTCT
GCCCGCGTTCAGGAGAAGTGACCCTGACGAAAGGGGACCCCGGTCCCTGGAGGAGTGGGAGACGGTG
GTGGGTGATGACTTCAGTCTCTACTATGATTCTACTCTGTGGATGAGCGCTGGACTCCGACAGCAAG
TCTGAAGTTGAAGCTCTAACTGAACAACAAAGTGAAGAGGAGGAGGAGGAAGAGGAGGAAGAAGAAGAA
GAGGAAGAGGAGGAGGAAGAGGAAGAAGAAGAGGAAGATGAGGAGTCAAGGAAATCAGTCAGATAGGAGT
GGTTCCAGTGGCCGGCGCAAGGCCAAGAAGAAATGGCGAAAAGACAGCCCATGGGTGAAGCCGTCTCGG
AAACGGCGCAAGCGGGAGCCTCCGCGGGCAAGGAGCCACGAGGGGTGTCCAATGACACATCTTCGCTG
GAGACAGAGCGAGGGTTTGAAGAGTTGCCCTGTGCAGCTGCCGATGGAGGCACCCAAGATTGACCCG
ATCAGCGAGAGGGCGGGGCACAAGTGATGGCCACTGAGAGTGTGGACGGAGAGCTGTGAGGCTGCAAT
GCCCCATCCTCAAGCGGGAGACCATGAGGCCATCCAGCCGTGTGCCCTGATGGTGCTCTGTGAGACC
```



[View online »](#)

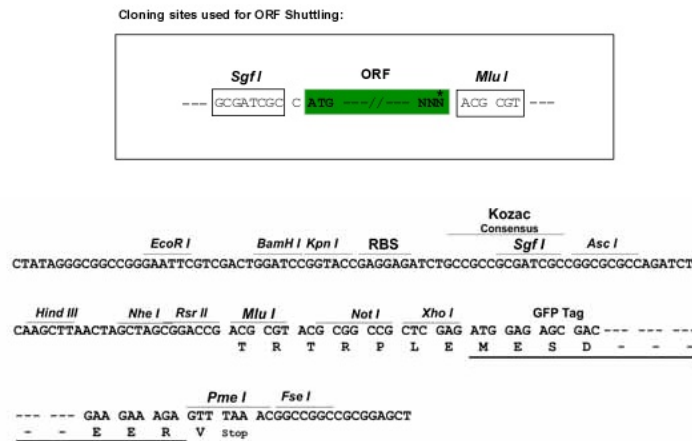
CACCGCGCCCGCATGGTCAAACACCACTGCTGCCCGGGCTGCGGCTACTTCTGCACGGCGGGCACCTTC  
CTGGAGTGCCACCTGACTTCCGTGTGGCCACCCTTCCACAAGGCTGTGTCTCAGCTGAATGGG  
ATGGTCTTCTGTCCCCTGTGGGGAGGATGCTTCTGAAGCTCAAGAGGTGACCATCCCCGGGGTAC  
GGGGTACCCACCGCCGGCACTGCAGCTCTGCACCCCAACCCTGTCCAGGATGTCCCGGGAGA  
GCAGACTTCTCAGCCAGTGCCGGATGCGAGGGCATGGGGAACCCCGCGCCCGCTGCGATCCC  
TGGGTGACACCATTGACAGCTCAGGGCCCTCCCTGACCCTGCCAATGGGGCTGCCTTTCAGCCGTG  
GGGTGCCACTGGGGCCAGGCCGGGAGGCCCTGGAAAAGGCCCTGGTCATCCAGGAGTCAGAGAGGCGG  
AAGAAGCTCCGTTTCCACCCTCGGCAGTTGTACCTGTCCGTGAAGCAGGGCGAGCTGCAGAAGGTGATC  
CTGATGCTGTTGGACAACCTGGACCCCACTTCCAGAGCGACCAGCAGAGCAAGCGCACGCCCTGCAT  
GCAGCCGCCCAGAAGGGCTCCGTGGAGATCTGCCATGTGCTGCTGCAGGCTGGAGCCAACATAAATGCA  
GTGGACAAACAGCAGCGGACGCCACTGATGGAGGCCGTGGTGAACAACCACCTGGAGGTAGCCGTTAC  
ATGGTGCAGCGTGGTGGCTGTGTCTATAGCAAGGAGGAGGACGGTTCACCTGCCTCCACCACGCAGCC  
AAAATCGGGAACCTGGAGATGGTCAAGCTGCTGCTGAGCACAGGACAGGTGGACGTCAACGCCAGGAC  
AGTGGGGGTGGACGCCATCATCTGGGTGCAGAGCACAAAGCACATCGAGGTGATCCGCATGCTACTG  
ACGCGGGGCGCCGACGTACCCTCACTGACAACGAGGAGAACATCTGCCTGCACTGGGCCTCCTTACG  
GGCAGCGCCGCCATCGCCGAAGTCTTCTGAATGCGCGCTGTGACCTCCATGCTGTCAACTACCATGGG  
GACACCCCTGCACATCGCAGCTCGGGAGAGCTACCATGACTGCGTGTGTTATTCCTGTACGTGGG  
GCCAACCTGAGCTGCGGAACAAGAGGGGGACACAGCATGGGACCTGACTCCCGAGCGCTCCGACGTG  
TGGTTTGCCTTCAACTCAACCGCAAGCTCCGACTTGGGGTGGGAAATCGGGCCATCCGCACAGAGAAG  
ATCATCTGCCGGGACGTGGCTCGGGCTATGAGAACGTGCCATTCCCTGTGTAACGGTGTGGATGGG  
GAGCCCTGCCCTGAGGATTACAAGTACATCTCAGAGAACTGCGAGACGTCCACCATGAACATCGATCGC  
AACATCACCCACTGCAGCACTGCAGTGTGTGGACGACTGCTTAGCTCCAACCTGCCTGTGCGGCCAG  
CTCAGCATCCGGTGTGATGACAAGGATGGGCGATTGCTCCAGGAATTAACAAGATTGAGCCTCCG  
CTGATTTTCGAGTGAACCAAGCGTGTCTATGCTGGAGAACTGCAAGAACCAGGTCGTACAGAGTGGC  
ATCAAGGTGCGGCTACAGCTCTACCGAACAGCCAAGATGGGCTGGGGGTCCGCGCCTGCAGACCATC  
CCACAGGGGACCTTATCTGCGAGTATGTGCGGGAGCTGATCTCTGATGCTGAGGCTGATGTGAGAGAG  
GATGATTCTTACCTCTTCGACTTAGACAACAAGGATGGAGAGGTGACTGCATAGATGCCCGTTACTAT  
GGCAACATCAGCCGTTTCAACACCTGTGTGACCCCAACATCATTCCCGTCCGGGTCTTATGCTG  
CACCAAGACCTGCGATTTCCACGCATCGCCTTCTTCAAGTCCCGAGACATCCGGACTGGGAGGAGCTA  
GGGTTTACTATGGCGACCGCTTCTGGGACATCAAAGCAAATATTTACCTGCCAATGTGGCTCTGAG  
AAGTGCAAGCACTCAGCCGAAGCATTGCCCTGGAGCAGAGCCGTCTGGCCCGCTGGACCCACACCT  
GAGCTGCTGCCCGAGCTCGGCTCCCTGCCCTGTCAACACA  
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

**Protein Sequence:** >Peptide sequence encoded by RG240065  
 Blue=ORF Red=Cloning site Green=Tag(s)

MRGLPRGRGLMRARGRGRAAPPGSRGRGRGGPHRGRGRPRSLLSLPRAQASWTPQLSTGLTSPVPCLP  
 SQGEAPAEMGALLLEKETRGATERVHGS LGDTPRSEETLPKATPDSL EPAGPSSPASVTVTGDEGADT  
 PVGATPLIGDESENLEGD LRGGRILLGHATKSFSPSSPKGGSCPSRAKMSMTGAGKSPPSVQSLAMR  
 LLSMPGAQGAAAAGSEPPPTTSPEGQPKVHRARKTMSKPGNGQPPVPEKRPEIQHFRMSDDVHSLGK  
 VTSDLAKRRKLSGGGLSEELGSARRSGEVTLTKGDPGSL EEWETVVGDDFSLYDYSYSDERVDSDSK  
 SEVEALTEQLSEEEEEEEEEEEEEEEEEEEEEDEESGNQSDRS GSSGRRKAKKKWRK DSPWVKPSR  
 KRRKREPPRAKEPRGVSNDTSSLETERGFEELPLCSCRMEAPKIDRISERAGHKCMATESVDGELSGCN  
 AAILKRETMRPSSRVALMVLCE THRARMVKHHCCPGCGYFCTAGTFLECHPDFRV AHRFHKACVSQLNG  
 MVFCPHCGEDASEAQEVTIPRGDVT PPAGTAAPAPPPLSQDVPGRADTSQPSARMRGHGEPRRPPCDP  
 LADTIDSSG PSLTLPNGGCLSAVGLPLGPGREALEKALVIQESERRK LRFHPRQLYLSVKQGELQKVI  
 LMLLDNLDPNFQSDQSKRTPLHAAAQKGSVEICHVLLQAGANINAVDKQRTPLMEAVNNHLEVARY  
 MVQRGGCVYSKEEDGSTCLHHAAKIGNLEMVSLLLSTGQVDVNAQDSGGWTPIIWAAEHKHIEVIRMLL  
 TRGADVLT DNEENICLHWASFTGSA AIAEVLLNARCDLHAVNYHGDTP LHI AARES YHDCVLLFLSRG  
 ANPELRNKEGDTAWDLTPERSDVWFALQLNRKLR LRVGNRAIRTEKIIICRDVARGYENVPICPVNGVDG  
 EPCPEDYKIYISENCETSTMNIDRNITHLQHCTCVDDCSSSNCLCGQLSIRCWYDKDGRLLQEFNKIEPP  
 LIFECNQACSWRNCKNRVVQSGIKVRLQLYRTAKMGWV RALQTI PQGT FICEYV GELISDAEADVRE  
 DDSYLFDLDNKDGEVYCIDARYYGNISRFINHLCDPNIPVRVFM LHQDLRFPRIAFFSSRDIRTG EEL  
 GFDYGRDFWDIKSKYFTCQCGSEKCKHSAEAI ALEQSR LARLDPHPELLPEL GSLPPVNT  
**TRTRP**LEME SDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSGYENPFLHA INNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPE D  
 SVIFTDKIIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHP SILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERY

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

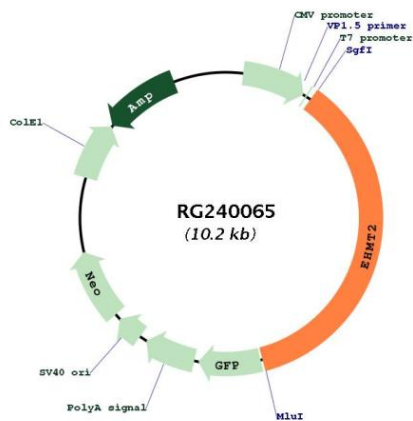


**ACCN:** NM\_001289413

**ORF Size:** 3699 bp

<b>OTI Disclaimer:</b>	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>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001289413.1</a> , <a href="#">NP_001276342.1</a>
<b>RefSeq Size:</b>	4045 bp
<b>RefSeq ORF:</b>	3702 bp
<b>Locus ID:</b>	10919
<b>UniProt ID:</b>	<a href="#">Q96KQ7</a>
<b>Cytogenetics:</b>	6p21.33
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Lysine degradation
<b>MW:</b>	135.9 kDa
<b>Gene Summary:</b>	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 RG240065