

Product datasheet for MC224190

Ehmt1 (NM_001012518) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ehmt1 (NM_001012518) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ehmt1
Synonyms:	9230102N17Rik; D330003E03; Eu-HMTase1; GLP; GLP1; KMT1D; mKIAA1876
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC224190 representing NM_001012518 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCGCTGATGCTGAGCAGGCAGTTCTGGCCAAGCAAGAGACCAAGCAGGATTGCTGCATGAAAA
CTGAGCTGCTAAGGGAAGATACACCTATGGCTGCTGATGAAGGTTCCACAGAGAAAACAAGAGGAGAGAC
TCCCATGGCTGCAGATGGAGAAAACAATGGGTCTTGTAAGAGAGTGGGGATCCCAGCCATCTAAATGCA
CCCAAACACACTCAGGAGAACACAAGAGCTAGCCACAGGAAGGCACCAACAGAGTGTCTCGGGTGGCAG
AAAATGGGGTTTCAGAAAGAGACACAGAAGTGGGGAAGCAAAAACCATGTCACAGCTGACGACTTCATGCA
GACATCTGTCAATTGGCAGCAATGGATATTTCTTAATAAACAGCCCTGCAGGGGAGCCGTTGAGGACT
CCCAACATTCTAACCTCCTCGCTTCTGGTCTGCTGCAAAAACCTCTTCTGGAGGAGCCAGTAAATGCA
GGACTCTGAGTGCACCTCCTCAGACACCAACCACAGCACCCTGTGCCTGGGGAAGGGAGTGCAGACAC
AGAGGACAGAAAGCCTACAGCCTCGGGCACTGATGTCAGGGTTCACAGGGCAGCAAGACCATGCCGAAG
TCCATCTGGGCTGCATGCAGCCAGCAAAGACCATAGAGAAGTCAAGACCATAAGGAACCAAAAAGAGG
ATATCAACAGAAACATTTCTGAATGTGGACGACAGCAGCTTTTACCAACCTTCCCAGCCCTCCACCAGT
GCTACCTCAGAATCAGTGTCTACATGGCCACCACAAAGTCCCAGACAGCTTGCTTGCCTTTTGTTTTAGCA
GCTGCAGTATCTCGAAAGAAAAACGAAGAATGGGAACCTATAGTTTAGTTCCCAAGAAAAAGACAAAAG
TATTAACACAGAGGACGGTGATTGAGATGTTTAAAGCATAAACCCATTCCACTGTGGGCGCAAGGGCGA
GAAAGCCTTAGATGATAGTGCCTGCATGTAATGGCGAGAGCTTGAGATGGACTCAGAAGATGAAGAC
TCCGATGAGCTGGAGGATGACGAGGACCATGGAGCTGAGCAAGCGGCTGCATTTCCACCAGGATAGTA
GGACTTCTAAAGAGAGCATGTCTGAGACTGACCGGCTGCAAAGATGGATGGAGATTGAGAGGAGGAACA
GGAGTCTCCGACACAGGGGAGGATGAAGATGGTGGAGACGAGTCTGACCTGAGTTCTGAATCCAGTATC
AGAAGAAATTTCTCAAGAGGAGAGGGAAGACTGACAGCCCTGGATCAAACCTGCTCGGAAAAGGAGGC
GGAGAAGTAGAAAGAAGCCGAGCAGCATGCTTGGTTCCGAGGCTTGTAAAGTCATCTCCAGGAAGCATGGA
GCAGGCAGCTCTGGGAGACAGCGCTGGCTATATGGAAGTTTCCCTGGATTCCCTGGATCTCCGTGTGAGA
GGAATTCTGTCTCCAGACAGAAAATGAAGGGCTGGCCAGTGGTCCGGATGTGCTGGGACGGATGGCC



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TCCAGGAAGTGCCTCTCTGCAGCTGCCGAATGGAAACCCCAAGAGCCGCGAGATCAGCACCTGGCCAA
 CAACCAGTGCATGGCCACTGAGAGCGTGGATCACGAATTGGGCCGGTGTACAAACAGCGTGGTCAAGTAT
 GAGCTGATGCGCCATCCAACAAAGCACCCTCTTGGTGTATGTGAAGACCATCGGGTTCGCATGGTGA
 AGCACCAGTGTCTCTGGCTGCGGCTACTTCTGCACGGCGGTAACCTCATGGAATGCCAGCTACTGTCCCATTTGT
 GGGGAAGAAGCTTCCAAGGCCAAAGAGGTGACCATAGCAAAAGCAGACACAACCTCCACAGTGCACCTAG
 CCCCTGGACAGGAGAAGAGCCTGGCTGCTGAAGGCAGGGCTGACACGACCAGGGCAGCATTGCTGGAGC
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 GGGCTCGTGAGGCCGACATCTGGCCTTTCCAGGGCCAGGAAAGGAAACCTTGAAAGTGTCTAATCG
 CTCTAGACTCTGAAAACCCAAGAACTTCGTTCCACCCAAAGCAGCTGTACTTCTCTGCCAGGCAGGG
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 GTGCCAATATTGACACTGCTCAGAGGACCAGCGGACCCACTGATGGAGGCTGCAGAGAACAACCACTT
 GGATGCAGTGAAGTACCTCATCAAGGCTGGAGCACAGGTGGATCCGAAGGACGCAGAGGGCTCCACATGT
 TTGCATTTGGCTGCCAAGAAAGGCCACTATGATGTGGTTCAGTATCTGCTTCAAATGGACAGATGGATG
 TCAACTGCCAGGATGACGGTGGATGGACACCTATGATCTGGGCCACTGAGTACAAGCACGTGGAGCTGGT
 GAAGCTGCTGCTGCTAAGGGCTCTGACATCAACATCCGGGACAACGAGGAGAACATTTGTCTGCACTGG
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 TCGCAGGTGTGGAGTGCATTGCAGATGAGCAAAGCACTTCGGGACTCAGCCCTGACAAGCCCGTTGCTG
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 GGACAGTGAGCTGTGCTACCAACTATAAGTATGTCTCCAGAAGTGTGACATCCCCATGAACATT
 GACAGGAACATCACTCATTTGCAGTACTGCGTGTGTGATAGTACTGCTCCTCTAGCACCTGCATGTGTG
 GCCAGCTGAGCATGCGCTGCTGGTATGATAAGGATGGCCGACTTCTGCCTGAGTTAACATGGCAGAACC
 ACCCTTGATCTTCGAGTGAATCATGCCTGCTCATGCTGGAGGAACTGCCGAATCGTGTGGTGC AAAAT
 GGTCTCAGGGCAAGGCTGCAGCTTTATCGGACACAGGACATGGGCTGGGGTGTGCGGTCCCTCCAGGATA
 TCCCACTGGGCACCTTTGTCTGCGAATACGTAGGGGAGCTGATTCGGACTCTGAAGCTGATGTTCCGGGA
 AGAGGACTCTTACCTCTTTGATCTTGACAATAAGGATGGAGAGGTATACTGCATTGACGCTCGGTTCTAT
 GGGAAATGTGAGCCGTTCCATAAACCACCCTGCGAACCCAACTTGTGCCTGTGCGAGTGTTCATGTCAC
 ACCAGGACTGCGGTTTCCAGGATTGCCTTCTCAGTACCCGCTGATTCAGGCTGGGGAGCAGCTCGG
 GTTCGACTACGGGAGCGCTTTTGGGACGTCAAGGGCAAGCTCTTCAGTTGCCGGTGTGGGTCTTCCAAG
 TGTCGGCACTCAAGCGCAGCCCTGGCCCAGAGGCAAGCCAGTGCAGCCCAGGAGCCTCAGGAGAATGGCC
 TTCCAGATACCAGCTCTGCAGCCGCTGCTGACCCCTATGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_001012518

Insert Size:

3891 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001012518.3](#), [NP_001012536.2](#)

RefSeq Size: 5107 bp

RefSeq ORF: 3891 bp

Locus ID: 77683

UniProt ID: [Q5DW34](#)

Cytogenetics: 2 A3

Gene 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 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. During G0 phase, it probably contributes to silencing of MYC- and E2F-responsive genes, suggesting a role in G0/G1 transition in cell cycle. In addition to the histone methyltransferase activity, also methylates non-histone proteins: mediates dimethylation of 'Lys-373' of p53/TP53.[UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.