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Product datasheet for MC224990

Kmt2e (NM_026984) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kmt2e (NM_026984) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Kmt2e
Synonyms:	1810033J14Rik; 9530077A04Rik; D230038D11Rik; Mll5; NKp44L
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

Fully Sequenced ORF:

>MC224990 representing NM_026984
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCATAGCGATCCCATTGGGGGTTGATACAACAGAAACATCCTACTTGGAAATGGCTGCAGGCTCAG
AACCGGAATCCGTAGAAGCTAGCCCTGTGGTAGTTGAGAAATCCAACAGTTTTCCCCACCAGTTATACAC
CAGCAGCTCCCACCACTCACACAGCTACATCGGTCTGCCCTATGCGGACCATAATTATGGTGCTCGTCCT
CCTCCAACACCTCCAGCATCCCCTCCTCCATCAGGTCTCATTAGCAAAAACGAAGTAGGCATATTTACCA
CTCCTAATTTTGATGAAACTTCCAGTGCTACTACAATCAGCACATCTGAAGATGGAAGTTACGGTACTGA
TGTAACCAGGTGCATATGTGGTTTTACACATGATGACGGATACATGATCTGTTGTGACAAATGCAGTGTT
TGGCAACATATTGACTGCATGGGGATTGACAGGCAGCATATTCCTGATACATACCTATGTGAACGTTGTC
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TGATACCAGTGCAACTGAAAGTGGTGATGAAGTTCCTGTGGAATTATATACTGCATTTCAGCATACTCCA
ACTTCAATCACTTTAACTGCTTCCAGAGTTCCCAAGGTTACTGATAAAAGAAGGAAAAAAAGTGGGGAGA
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CCTGATGCACTTATCATTGAATATAGAGGGAAGTTTATGCTGAGAGAACAGTTTGAAGCAAATGGATATT
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AAAGGAAAAAAAGAGAAAGATACTTCAAAAGAAAAAGACATACAAAATCAGAATATGACTTTGGACTGTG

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AAGGAACAAACAACAAAATAAGGAGTCCAGAAACAAAACAGAGAAAGCTTTCTCCATTGAGGCTGTCGGT
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ACCGCCATCTTCTCCTGACATCGAAGTTCTGTCACAACAGAACGAGATTGAAAATACTGTACTTGCTATA
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CGGCTTCCGAGTAAGTGAGTCCAAGTGCCTGATTCAGCAGGATGACACTAGAGGCATGTTTCTGGGAGCG
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TGGACTGCCTCCACTTCAGTGGAGCAAGTGAGAGAGAGAAGTTACCAGAGAGCCTTACTGCTCAGTGACC
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AGAGCCCTTCTAAAACAAGCAAGCCTGGTTCACCAGGGCCAATCAATCCTGCTCAGTCACATGGGAAAAT
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TCCGTCACCTCACACAGAAAACCCTCCCAAGTCCTCCACACCTCACACCCCCGTGCAGCATGGTTACCTC
TCGCCAAAGCCTCCTTCACAGCACTTAGGATCTCCCTTCAGGCCTCACCATTCACAATCACCTCAAGTTG
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CATTTACCACCACCCCCTCCACCACCTGGTCCTGCCCCACATCACCATCCCCCACCCCATCCTACCACGG
GACTGCAAAGTCTACAAGCACAACACCAGCATGTAGTAAACTCGGCACCCCCGCCCCCTCCCCCTCCCCC

GCCCCCTCCCCCAGCCAGTGTTCTGGTTTCTGGGCATCATTCAGCATCAGGTCAAGCCTTACACCACCCA
CCTCATCAAGGACCTCCACTTTTCCCTGCAAGCGCTCATCCAGCTGTCCCGCCGTACCCCTCACAAGCCA
CACATCATACCACTTTGGGACCGGGACCCCAACACCAGCCTTCCGGAACAGGGCCACATTGTCCATTACC
AGTTGCAGGTCCTCATCTCCAGCCCCAAGGACCAAACAGTATTCCAACCCCTACTGCTTCAGGGTTCTGT
CCTCATCCTCATCCTGGCTCTGTGGCCCTGCCACATGGGGTGCAAGGACCTCAGCAGGCATCGCCAGTGC
CTGCACAGATTCCAATTCACAGAGCACAGGTGCCGCCGACATTTCAAAACAATTACCACGGTTCAGGGTG
GCATTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_026984
Insert Size:	5607 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_026984.1, NP_081260.1
RefSeq Size:	7258 bp
RefSeq ORF:	5607 bp
Locus ID:	69188
UniProt ID:	Q3UG20
Cytogenetics:	5 A3

Gene Summary: Associates with chromatin regions downstream of transcriptional start sites of active genes and thus regulates gene transcription (By similarity). Chromatin interaction is mediated via the binding to tri-methylated histone H3 at 'Lys-4' (H3K4me3) (By similarity). Key regulator of hematopoiesis involved in terminal myeloid differentiation and in the regulation of hematopoietic stem cell (HSCs) self-renewal by a mechanism that involves DNA methylation (PubMed:18854576, PubMed:18952892, PubMed:18818388). Also acts as an important cell cycle regulator, participating in cell cycle regulatory network machinery at multiple cell cycle stages including G1/S transition, S phase progression and mitotic entry (PubMed:19264965). Recruited to E2F1 responsive promoters by HCFC1 where it stimulates tri-methylation of histone H3 at 'Lys-4' and transcriptional activation and thereby facilitates G1 to S phase transition (By similarity). During myoblast differentiation, required to suppress inappropriate expression of S-phase-promoting genes and maintain expression of determination genes in quiescent cells (PubMed:19264965).[UniProtKB/Swiss-Prot Function]