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Product datasheet for MC222167

Mphosph8 (NM_023773) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mphosph8 (NM_023773) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mphosph8
Synonyms:	1500035L22Rik; 4930548G07Rik; AU040635
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

>MC222167 representing NM_023773
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCGGCGGCTGAGGAGGGCATGAGTGCGGCCGCTCTAGTTATGTCAGTTCCCGACAGCATTGGCC
GTTCTCCCGAGTCCGAAGGAGTTGGAGCAGGGGACGAAGAGAAGGACGCAGCCACCAAAGGAACGGTGGC
CGTTGGGGACAGCGAGGAGGATGGGGAGGACGTTTTCGAGGTGGAGAGGATCCTGGACATGAAGTGCGAG
GGAGGTAAGAATCTTTATAAAGTTCGATGGAAAGGATATACATCTGAAGATGATACCTGGGAGCCTGAGG
TTCATCTGGAGGACTGTAAGGAAGTTCTTCTTGAATTCAGGAAGAAACTTGCTGAGAACAAAGCTAAAGC
AGTCAGGAAAGATATTCAGAGACTATCTTTAAACAATGACATATTTGAGGCAGACAGTGATAGCGACCAG
CAAAGTGACACAAAAGAAGATATTTCACCAAGGAAGAAAAAGAAAAAAATAAAGTGCAAAGAAGAGACAA
GTCCAGAAGATCTGAGGAAAAAAAGGACAAAAATGGGAAAACTAAAAGACAAGTTCAAGACAGAGCTGGA
GAGCACCTCTGAAATAATCGGTTTCGATGTAAAGACGAAGAAAAGAATTTGGGAAGTCAAGGAAGAATTA
AAGGACTCCAAAAAGCCCAAAAAGGATGAAATAAAGGAAACCAAGGAATTAAAGAAAGCTAATAAAAGGG
CTGAAGTAAGAGATTTAAAGATTAAAATAAGAGAAGATGTCAAAGAGAACCGAAAAACAAAAAAAGAGAG
ATATATAGAATCTCCGCTGGAGTCTGAATCGCCTAATGATTCCCTCATTCTAGAGGATGACAGTGAAGAC
TTTATTTCTGACAACAGAGAAGAGAATCAGAATGTGAGAAGTGTAAGAGATAAGACAGCACAGGAGACAG
TGCAAGAGGGTATTTTTGAGAAACATCTGGATGACCTTATAAGTATTGAAGAGGATGCTGGTACCCGAGT
TAGAAGGAAGAAGACGAAGCCAAGAAAGTTTGAGGAACCAAAAGAGATCAAGAAGCTTGAAAGCACGAAT
GCCTTTTTAGAAAGGAGAGCAATACCCAAAAAGCAAAGAAACCAAGACAAGGGCATAAGTAACCTAGAGT
TAAATAAGCTACCATCACCTGTGTTTGCCCAAACCCTGAAAAGTTCCAGACTGAGTGGGGAAGAGAAGAG
CCTAAAGTCCCCTGACTTGGCAGAAGAGGAGAAAGAGAAAAAAAATGAACCCAAAGGAAAATACCAGAAA
AGGTATGATTTGGACAAAGAAGAAAAAGCCAGAAAAGAGCCAAAGGTATTAAAATCATTTAAGGAAATCA
GAAATGCATTTGATTTATTTAAAAAAACAACAGAAGAAAAAAATGATGTTCTTGAGAATAATTCAAAAAG
AGAAGAAATATCACTGGATTCTAAAATTATGAATGATAACAAAACCAAGGACAAGTGTTCACTTAAAGAA
AAAAGAAATACTCGAGATGAGACTGACACTTGGGCATACATTGCTGCAGAAGGGGATCAGGAAGTTTCAG
ACAGTGTATGCCAAACAGATGAGACGTCTGATGGCAGGCAACCAGTTTTGAGTTTGGGTATGGACCTGCA
GCTGGAGTGGATGAAATTAGAAGATTTTCAGAAGCATCTGGATGGGGAAGATGAGCCCTTTATCACAACA
AACAGGATTCCAAATAATTTGTTGAGGGATGCTGTGAAAAATGGAGATTATATTGCTGTGAAGGTTGCAC
TGAACTCAAATGAAGAATACAACTTGGATCAAGAGGATTCTACTGGGATGACCCTGGTGATGTTGGCTGC
AGCAGGCGGTCAGGACGACCTCCTCAGACTCCTTATCACCAAAGGTGCAAAAGTGAATGGGCGCCAGAAA
AACGGGACTACAGCCCTCATTCATGCCGCTGAGAAGAACTTTTTAACAACTGTAGCTATTCTTTTGGAAG
CTGGAGCTTTTGTGAATGTTCAGCAAAGCAATGGTGAGACTGCGCTCATGAAAGCATGCAAAAGAGGAAA
TTCGGACATTGTCCGCCTTGTGATTGAATGTGGAGCTGACTGCAACATTTTGTCAAAGCACCAAAATAGT
GCATTGTACTTTGCAAAGCAGTGTAATAATGTGCTTGTATATGAACTGCTGAAGAGCCACTTGGAGACAC
TTTCCAGAGTTGCAGAAGAAACAATCAGGGATTACTTTGAATCTCGCCTTGCTCTACTGGAACCTGTTTT
CCCAATAGCATGCCATCGGCTCTGTGAGGGGCCGGATTTCTCAACAGATTTCAATTACATGCCCCCTCAG
AACATGCCTGAAGGCTCTGGTGTCCTCCTCTTTATTTTCCATGCAAACTTTTTGGGCAAAGACGTTATTG
CTCGGCTTTGTGGACCATGCAGTGTACAAGCTGTGGTTTTAAATGATAAATTTCAACTTCCTGTTTTTCT
GGACAGTCACTTTGTTTATTCATTCAGTCCTGTTGCTGGCCCCAATAAGTTGTTTATAAGGTTGACGGAA
GCACCCTTTGCCAAGGTTAAGTTGCTAATAGGTGCATACAGAGTACAGCTGCAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_023773

Insert Size: 2577 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_023773.2, NP_076262.2
RefSeq Size:	2954 bp
RefSeq ORF:	2577 bp
Locus ID:	75339
UniProt ID:	Q3TYA6
Cytogenetics:	14 C3
Gene Summary:	Heterochromatin component that specifically recognizes and binds methylated 'Lys-9' of histone H3 (H3K9me) and promotes recruitment of proteins that mediate epigenetic repression. Mediates recruitment of the HUSH complex to H3K9me3 sites: the HUSH complex is recruited to genomic loci rich in H3K9me3 and is required to maintain transcriptional silencing by promoting recruitment of SETDB1, a histone methyltransferase that mediates further deposition of H3K9me3, as well as MORC2. Binds H3K9me and promotes DNA methylation by recruiting DNMT3A to target CpG sites; these can be situated within the coding region of the gene. Mediates down-regulation of CDH1 expression. Also represses L1 retrotransposons in collaboration with MORC2 and, probably, SETDB1, the silencing is dependent of repressive epigenetic modifications, such as H3K9me3 mark. Silencing events often occur within introns of transcriptionally active genes, and lead to the down-regulation of host gene expression. The HUSH complex is also involved in the silencing of unintegrated retroviral DNA by being recruited by ZNF638: some part of the retroviral DNA formed immediately after infection remains unintegrated in the host genome and is transcriptionally repressed.[UniProtKB/Swiss-Prot Function]