

Product datasheet for **MC216611**

Hdac1 (NM_008228) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hdac1 (NM_008228) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Hdac1
Synonyms:	HD1; Hdac1-ps; MommeD5; RPD3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC216611 representing NM_008228
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCAGACTCAGGGACCAAGAGGAAAGTCTGTACTACTACGACGGGATGTTGGAAACTACTATT
ATGGACAAGGGCACCCCATGAAGCCTCACCGAATCCGCATGACTCACAATTTGCTGCTCAACTATGGTCT
CTACCGAAAAATGGAGATCTACCGTCTCACAAAGCCAATGCTGAGGAGATGACCAAGTACCACAGTGAT
GACTACATTAAATTCCTGCGTTCTATTGCCCCAGATAATATGTCTGAATACAGCAAGCAGATGCAGAGAT
TCAATGTTGGTGAGGACTGTCCGGTGTGGATGGCTTGTGGAGTTCTGTCAAGTTGTCACGGGAGGCTC
TGTGCGAAGTGCTGTGAAGCTTAATAAGCAGCAGACGGACATCGCTGTGAAGTGGGCCGGGGGCTGCAC
CATGCAAAAGAAGTCTGAAGCTTCTGGCTTCTGTTACGTCAATGACATCGTCTGGCCATCTTGGAACTGC
TAAAGTACCACAGAGGGTGCTCTATATTGACATGTGATATCCACATGGCGATGGCTGGAAGAGGCTCT
CTATACTACAGACGGGTGTCAGTCTGTGCTCTTCAATAAATCGGAGAGTACTTCCAGGAATCGGGAC
CTACGGGACATTGGGGCTGGCAAAGGCAAGTACTATGCTGTGAAGTACCCACTGCGAGACGGCATTGACG
ACGAATCCTATGAAGCCATCTTTAAGCCAGTCATGTCCAAAGTAATGGAGATGTTCCAGCCTAGTGCGAT
GGTCTTACAGTGTGGCTCAGATTCCCTGTCTGGGGACCGGTTAGGTTGCTTCAATCTGACCATCAAAGGA
CACGCCAAGTGTGTGGAGTTCGTGAAGAGTTTCAACTTGCCCATGCTGATGCTGGGAGGAGGTGGCTACA
CCATCCGAATGTTGCTCGCTGCTGGACTTACGAAACAGCGGTGGCCCTGGACACAGAGATCCCTAATGA
GCTGCCCTACAACGACTACTTTGAATACTTTGGACCGGATTTCAAGCTTCACATCAGCCCTTCCAACATG
ACCAACCAGAACTAACGAGTACCTGGAGAAGATCAAGCAGCGTCTCTTTGAGAACTTGAGGATGCTGC
CCCATGCCCCCTGGGGTCCAGATGCAGGCCATCCCTGAGGATGCCATCCCCGAAGAGAGTGGGGATGAAGA
TGAGGAGGACCTTGACAAACGCATCTCCATCTGCTCTCTGACAAACGCATTGCTGTGAGGAAGAGTTCT
TCGGACTCAGATGAGGAGGGAGAGGTGGTGCAGAAAGATCTTTCAAGTCAAAAAAGCCAAAAGAGTTA
AAACAGAGGATGAGAAAGAGAAAGATCTCTGAAGAGAAAAAGAACTCAGAGAAGAGAGAAAACCAAGGA
GGAGAAGCCAGAAGCCAAAGGGGTCAAAGAAGAGGTCAAGTTGGCCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_008228
Insert Size:	1449 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_008228.2, NP_032254.1</u>
RefSeq Size:	1971 bp
RefSeq ORF:	1449 bp
Locus ID:	433759
UniProt ID:	<u>O09106</u>
Cytogenetics:	4 63.26 cM
Gene Summary:	<p>Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Deacetylates SP proteins, SP1 and SP3, and regulates their function. Component of the BRG1-RB1-HDAC1 complex, which negatively regulates the CREST-mediated transcription in resting neurons. Upon calcium stimulation, HDAC1 is released from the complex and CREBBP is recruited, which facilitates transcriptional activation. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Deacetylates 'Lys-310' in RELA and thereby inhibits the transcriptional activity of NF-kappa-B. Deacetylates NR1D2 and abrogates the effect of KAT5-mediated relieving of NR1D2 transcription repression activity. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. Involved in CIART-mediated transcriptional repression of the circadian transcriptional activator: CLOCK-ARNTL/BMAL1 heterodimer. Required for the transcriptional repression of circadian target genes, such as PER1, mediated by the large PER complex or CRY1 through histone deacetylation.[UniProtKB/Swiss-Prot Function]</p>