

Product datasheet for **MR231288**

Hdac7 (NM_001204280) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hdac7 (NM_001204280) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hdac7
Synonyms:	5830434K02Rik; HD7; HD7a; Hdac7a; mFLJ00062
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR231288 representing NM_001204280
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGACCTGCGGGTGGGCCAGCGCCACGGTGGAGCCCCACCAGACCTGCGCTGCTGACCTGCAAC
 ACCCCCAACGCCTGCACCGCCATCTTCTTGGCAGGCTTACACCAGCAACAGCGCTCAGCCGAGCCCAT
 GAGGCTCTCCATGGACCCACCAATGCCGGAGCTGCAGGGGGACAGCAGGAGCAAGAATTCGGCAACTT
 CTCAATAAAGACAAGAGCAAGCGAAGTGCCGTAGCCAGCAGTGTGGTCAAGCAGAAGCTGGCTGAAGTGA
 TCCTGAAGAAACAGCAGGCAGCCCTTGAGAGAACAGTCCATCCCAGCAGCCCCAGTATCCCTACAGAAC
 TCTTGAGCCCTGGACACAGAGGTGCTGCCCGCTCCGTGCTTAGCAGCTTCTGCCTCTGTGCCAGC
 CTGCCACTGAACCCCGAACACTTCCCTTGCCTAAAACAGTGTCTGAACCCAACTGAAGTTGCGCT
 ACAAACCAAGAAATCCCTGGAGAGACGAAGAATCCCTGCTCAGGAAGGAGAGTGCCCGCCAGCCT
 TCGGAGGAGGCCGCGAGACCCCTGGAGATTCCTCCCCAGTAGTAGCAGCACACCCCGCTCAGGGTGC
 AGCTCCCCAATGACAGCGAGCATGGCCCTAACCTGCCCTAGGCTCAGAGGCTGATGGTGACCCGACGGA
 CCCATTCAACTTAGGCCCTCGGGTCTGTACTGGGAAACCCCATGCTCCCCTCTTCTGCACACCGG
 TCTGGAGCCAGAGGCTGGGGCACCTTACCCTCTCGCCTGCAACCCATTCTCTGCTGGACCCCTCAGTC
 TCTCATGCCCCACTGTGGACTGTGCCTGGCCTTGGGCCCTTGCCCTTCCACTTGGCCAGCCCTTACTGA
 CCACCGAGCGGCTCTCTGGGTGAGGCTCCATCGACCACTTAACCGACCCGCTCAGAGCCCTGCCCC
 CAGCGCCACAGCCTCCCCTCTGCTGGCCCCCTGCAGCCCCGCCAGGATCGGCTCAAACCTCACGTCCAG
 CTGATCAAGCCAGCCATCTCCCCTCCCCAGAGGCTGCCAAGCCAGTGAAGAAGCCCGACTGCGACAGA
 TACCCTCGGCTGAGGACCTAGAGACAGATGGTGGGGAGTGGACCTATGGCGAATGATGGCTGGAACA
 TAGGGAGTCAGGCGTGGGCCTCCTGAGGGCAGAGGCTCCATTTCTCTGCAGCAGCATCAACAGGTGCCA
 CCCTGGGAGCAGCAGCATCTAGCCGGCGGCTCTCTCAGGGAAGCCCGGGGACTCCGTGCTGATACCTC
 TGGCCAGGTTGGACACCGGCCCTGTCCAGAACCAGTCTTCCCAGCAGCACCTGTCTCCCTGCTGAG
 CCCAGAGCCACCTGTCAGACCAAGTCTCAACAGCTCAGAGACACCTGCTACAGGGCTGGTCTATGAC
 TCGGTGATGCTGAAACACCAATGTTCTGTGGAGACAACAGCAAGCATCCCAGCATGCAGGCCGATCC
 AGAGCATCTGGTCCGGCTGCAGGAACGGGGTCTCCGACGCCAGTGTGAGTGTCTCCGAGCCGAAAGGC
 TTCCCTAGAGGAGCTGCAGTCACTCTGAACGGCACGTGCTCCTCTACGGCACGAACCCACTCAGC
 CGCCTCAAACCTGGATAACGGGAAGTTACAGGACTCCTGGCACAGCGGACGTTTGTGATGCTACCCTGTG
 GCGGGGTTGGGGTCGATACTGACACCATCTGGAACGAGCTGCATTCTCCAATGCAGCCCGCTGGGCTGC
 GGGCAGTGTACCCGACCTTGCCCTCAAAGTAGCTTCCCAGAGCTGAAGGATGTTACCATGGCAACGGC
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 GGCAGGAGGCCCGTGGTGGCTTGGCCTTAGAGGGTGGACATGACCTCACGGCCATCTGTGATGCCTCGGAG
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 ACCTCAGTGCCATCCGCTCGCTGGAAGCTGTGGTCAAGGTGCACAGGAAATACTGGGGCTCATGCAGCG
 CTTGGCCTCCTGTCCAGACTCCTGGCTACCCAGAGTGCCGGGAGCTGATGCAGAAGTGAAGCCGTGACC
 GCGCTGGCATCCCTTCTGTGGGCATCCTGGCTGAAGACAGGCCCTCGGAGCGGCTGGTGAAGAGGAAG
 AACCCATGAACCTC

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231288 representing NM_001204280
 Red=Cloning site Green=Tags(s)

MDLRVGRPTVEPPPEPALLTLQHPQRLHRHLFLAGLHQQRSAEPMRLSMDPPMPELQGGQQEQELRQL
 LNKDKSKRSVAVSSVVKQKLAEVLKQQQAALERTVHPSSPSIPYRTLEPLDTEGAARSVLSSFLPPVPS
 LPTEPEHFPLRKTVSEPNLKLRYKPKKSLERRKNPLLRKESAPSLRRRPAETLGDSSPSSSSTPASGC
 SSPNDSEHGPNPALGSEADGDRRTHSTLGPGRPVLGNPHAPLFLHHGLEPEAGGTLPSRLQPILLLDPSV
 SHAPLWTVPLGGLPFHFAPQLLTERLSGSLHRPLNRTRSEPLPSATASPLLAPLQPRQDRPKPHVQ
 LIKPAISPPQRPAPKSEKPRLRQIPSAEDLETDGGGVGPMANDGLEHRESGRGPPPEGRGSIQQHQQVP
 PWEQQHLAQRSLQGGSPGDSVLIPLAQVGHRLSRTQSSPAAPVLSLSPEPTCQTQVLNSSETPATGLVYD
 SYMLKHQCSCGDNSKHPEHAGRIQSIWSRLQERGLRSQCECLRGRKASLEELQSVHSEHVLLYGTNPLS
 RLKLDNGKLTGLLAQRTEVMLPCGGVGVDTDTIWNELHSSNAARWAAGSVTDLAFKVASRELKDVHHGNG
 TQQTFYQDPSVL YISLHRHDDGNFFPGSGAVDEVGTGSGEGFNVNVAWAGGLDPPMGDPEYLAAFRIVVM
 PIAREFAPDLVLSAGFDAAEHAPLGGYHVS AKCFGYMTQQLMNLAGGAVVLALEGGHDLTAICDASE
 ACVAALLGNKVDPLSEESWKQKPNLSAIRSLEAVVRVHRKYWGCMQRLASCPD SWLPRVPGADAEVEAVT
 ALASLSVGILAE DRP SERLVEEEEEPMNL

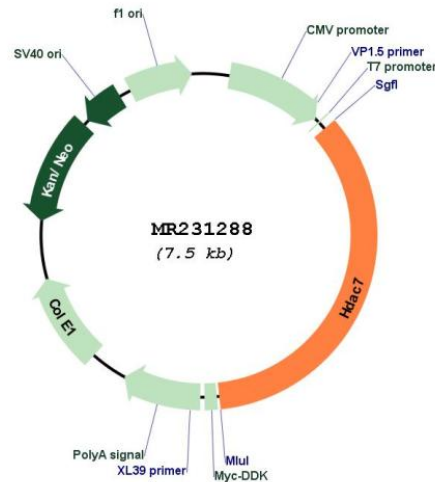
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001204280

ORF Size: 2604 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001204280.1](#), [NP_001191209.1](#)

RefSeq Size: 4084 bp

RefSeq ORF: 2607 bp

Locus ID: 56233

Cytogenetics: 15 F1

MW: 94.3 kDa

Gene Summary:

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. Involved in muscle maturation by repressing transcription of myocyte enhancer factors such as MEF2A, MEF2B and MEF2C. During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors. Positively regulates the transcriptional repressor activity of FOXP3 (By similarity). Serves as a corepressor of RARA, causing its deacetylation and inhibition of RARE DNA element binding (By similarity). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (By similarity).[UniProtKB/Swiss-Prot Function]