

## Product datasheet for **MR231423**

### Hdac7 (NM\_001204275) Mouse Tagged ORF Clone

#### Product data:

|                    |   |
|--------------------|---|
| Product Type:      | Expression Plasmids                         |
| Product Name:      | Hdac7 (NM_001204275) 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:**

>MR231423 representing NM\_001204275  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGACCTGCGGGTGGGCCAGCGCCACGGTGGAGCCCCACCAGACCTGCGCTGCTGACCCGCAAC  
 ACCCCCAACGCCTGCACCGCCATCTTCTTGGCAGGCTTACACCAGCAACAGCGCTCAGCCGAGCCCAT  
 GAGGCTCTCCATGGACCCACCAATGCCGGAGCTGCAGGGGGACAGCAGGAGCAAGAATTCGGCAACTT  
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 TCCTGAAGAAACAGCAGGCAGCCCTTGAGAGAACAGTCCATCCCAGCAGCCCCAGTATCCCTACAGAAC  
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 AGCTCCCCTAATGACAGCGAGCATGGCCCTAACCTGCCCTAGGCTCAGAGGCGCTCTTGGGCCAGCGGC  
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 TGGAACGAGCTGCATTCTCCAATGCAGCCCGTGGGCTGCGGGCAGTGTACCCGACCTTGCCCTCAAAG  
 TAGCTTCCCGAGAGCTGAAGATGGCTTTGCTGTGGTGCACCCCGGGACACCATGCAGATCATTCTAC  
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 TCCTGGCTGAAGACAGGCCCTCGGAGCGGCTGGTGAAGAGGAAGAACCATGAACCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231423 representing NM\_001204275  
 Red=Cloning site Green=Tags(s)

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MDLRVQGQRPTVEPPPEPALLTLQHPQRLHRHLFLAGLHQQRSAEPMRLSMDPPMPELQGGQQEQELRQL
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HRPLNRRTRSEPLPPSATASPLLAPLQPRQDRPKPHVQLIKPAISPPQRPAPKSEKPRLRQIPSAEDLETD
GGGVGPMANDGLEHRESGRPPEGRGSIISLQQHQVPPWEQQHLAGRLSQSGPGDSVLIPLAQVGHRLPS
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GLRSQCECLRGRKASLEELQSVHSEHVLLYGTNPLSRLKLDNGKLTGLLAQRTFVMLPCGGVGVDTDTI
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MGDPEYLAAFRIVVMPIAREFAPDLVLSAGFDDAEGHPAPLGGYHVSACFCGYMTQQLMNLAGGAVVLA
LEGGHDLTAICDASEACVAALLGNKVDPLSEESWKQKPNLSAIRSLEAVVRVHRKYWGCMQRLASCPSDW
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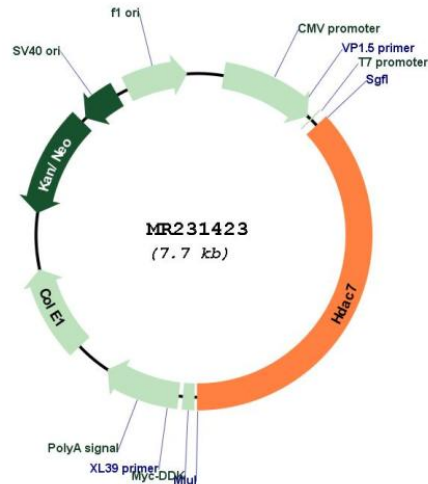
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001204275

**ORF Size:** 2859 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\\_001204275.1](#), [NP\\_001191204.1](#)

**RefSeq Size:** 4339 bp

**RefSeq ORF:** 2862 bp

**Locus ID:** 56233

**UniProt ID:** [Q8C2B3](#)

**Cytogenetics:** 15 F1

**MW:** 103.4 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]