

Product datasheet for **MG226686**

Hdac6 (NM_010413) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hdac6 (NM_010413) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Hdac6
Synonyms: Hd6; Hdac5; mHDA2; Sfc6
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG226686 representing NM_010413
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACCTCCACCGCCAAGATTCTTCTACTAGACAGCGAAAGAGTAGGCACAATCCCCAGTCACCCCTTC
AGGAATCCAGCGCCACCTTGAAGCGTGGTGAAAGAAGTGTGCTGTACCCCACTCCAGCCCCAATCTAGC
GGAGGTAAGAAGAAAGCAAAATGAAGAAGCTGAGCCAACCAAGTGAAGAGGACCTAGTTGTGGGGCTT
CAAGGGCTGGATCTGAACCTGAGACAAGAGTCCAGTTGGTACTGGATTGGTGTGGATGAACAATAA
ATGACTTCCATTGCCTTTGGGATGACAGCTTCCCTGAAAGCCCTGAGCGGCTCCATGCCATCAGAGAGCA
ACTGATCCTGGAGGGCCTCCTGGCCGCTGTGTCTTTTCAGGCCCGGTTTCGCTGAGAAGGAGGAGCTG
ATGTTGGTTCACAGCCTGGAATACATTGATCTGATGGAGACAACCCAGTACATGAATGAAGGGGAGCTTC
GAGTACTGGCAGAAACCTATGATTCAGTGTATCTGCATCCGAACCTCATATTCCTGTGCCTGCCTGGCTAC
AGGCTCTGTCCCTCCGGCTGGTAGATGCACTCATGGGGGCTGAGATTCCGAATGGCATGGCCGTCATCAGG
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AGGAACACAGTTCATCTCGACCAGGACCCAGTGTCTTTATTTCTCCATCCACCGATATGAACATGGT
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GAGGCAAGTTGATTCTGTCCCTGGAGGGTGGCTATAACCTCCGTGCCCTGGCTAAGGGAGTCAGTGCTTC
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CACTGCAACCTCTGGGACAATCATCACCTGAGACACCTCAGCGCATCTTACGCATCATGTGTACCTGG
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AGGAGAACTGGTGTGTCTGACTTGCTATCAGGTGTAAGTGCAGTCGCTATGTCAATGCCCATATGGTCTG
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CAGGCTTATGTCCACCACGAGGATCTCCAAGATGTGAAGAACGCTGCCACCAGAACAAGTTTGGGGAGG
ACATGCCCACTCACAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

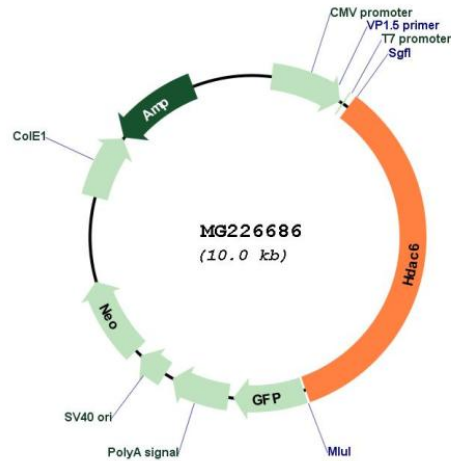
Protein Sequence: >MG226686 representing NM_010413
 Red=Cloning site Green=Tags(s)

MTSTGQDSSTRQRKSRHNPSPLQESSATLKRGGKCAVPHSSPNLAEVKKKGKMKKLSQPAEEDLVVGL
 QGLDLPETRPVPGTGLVFDEQLNDFHCLWDDSFPEPERLHAIREQLILEGLLGRVSVFQARFAEKEEL
 MLVHLSLEYIDLMTTQYMNEGELRVLAETYSVYLHPNSYSCACLATGSVLRRLVDALMGAEIRNGMAVIR
 PPGHHAQHNLMDGYCMFNHLAVAARYAQKHHRIQRVLIQVWVHGGQGTQFIFDQDPSVLVYFSIHRVEHG
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 TSIYCTLEALEPFWEVLERSVETQEEDVEEAVLEEEEEEGWEATALPMDTWPLLQNRITGLVYDEKMMMS
 HCNLWDNHPETPQRILRIMCHLEEVGLAARCLILPARPALDSELLTCHSAEYVEHLRTEKMKTRDLHR
 EGANFDSIYICPSTFACAKLATGAACRLVEAVLSGEVLNGIIVRPPGHHAEPNAACGFCFNSVAVAAAR
 HAQIIAGRALRILIVDWDVHGGNGTQHIFEDDPSVLYVSLHRYDRGTFPPMGDEGASSQVGRDAGIGFTV
 NVPWNGPRMGDADYLAAWHRLVLPYAYEFNPELVLSAGFDAQDPLGGCQVTPGYAHLTHLLMGLAG
 GRIILILEGGYNLASESMAACTHSLLDGPPPQLTLLRPPQSGALVSISEVIQVHRKYWRSRLMKMED
 KEECSSSRLVIKKLPPTASPVSAKEMTTPKGKVPPEESVRKTIAALPGKESTLQAKSKMAKAVLAQGOSS
 EQAAKGTTLDLATSKETVGGATTDLWASAAAPENFPNQTTSVEALGETEPTTPASHTNKQTTGASPLQGV
 TAQQSLQLGVLSTLELSREAAEAHDSEGLLGEAAGGQDMNSLMLTQGFDFNTQDVFYAVTPLSWCPHL
 MAVCPIPAAGLDVSPCKTCGTVQENWVCLTCYQVYCSRYVNAHMVCHHEASEHPLVLSVDLSTWCYVC
 QAYVHHEDLQDVKNAAHQKFGEDMPHSH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
Cloning Scheme:



Plasmid Map:


ACCN: NM_010413

ORF Size: 3447 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_010413.3](#), [NP_034543.3](#)

RefSeq Size: 4142 bp

RefSeq ORF: 3450 bp

Locus ID: 15185

UniProt ID: [Q9Z2V5](#)

Cytogenetics: X 3.58 cM

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 (By similarity). Plays a central role in microtubule-dependent cell motility via deacetylation of tubulin.[UniProtKB/Swiss-Prot Function]