

Product datasheet for **SC316282**

HDAC7 (NM_001098416) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: HDAC7 (NM_001098416) Human Untagged Clone
Tag: Tag Free
Symbol: HDAC7
Synonyms: HD7; HD7A; HDAC7A
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Neo
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001098416 edited
CAGCCTCCGGCGACTGGGGGATGTGAGGCCGGCGCCCCAGCCCCCGCCCCGCCATGAG
CCCCCGCTCTGAGGGCCCCGGCCCTGGATGCACAGCCCCGGCGCTGATGGACCCAGG
TGAGCCCGGGTGCCCACTACTGCAGCCCCACTGGCGCAGGCTGCCAGGCCCTGTGCAG
ACACACCAGGCCCTCAGCCGAGCCCATGGACCTGCGGGTGGGCCAGCGCCCCAGTGG
AGCCCCACCAGAGCCCACATTGCTGGCCCTGCAGCGTCCCCAGCGCTGCACCACCACC
TCTTCTAGCAGGCTGCAGCAGCAGCGCTCGGTGGAGCCATGAGGCTCTCCATGGACA
CGCCGATGCCGAGTTGCAGGTGGGACCCAGGAACAAGAGCTGCGGCAGCTTCTCCACA
AGGACAAGAGCAAGCGAAGTGTGTAGCCAGCAGCGTGGTCAAGCAGAAGCTAGCGGAGG
TGATTCTGAAAAAACAGCAGGCGGCCCTAGAAAAGAACAGTCCATCCCAACAGCCCCGGCA
TTCCCTACAGAACCCTGGAGCCCTGGAGACGGAAGGAGCCACCCGCTCCATGCTCAGCA
GCTTTTTCCTCCTGTTCCAGCCTGCCAGTGACCCCCCAGAGCACTTCCCTCTGCGCA
AGACAGTCTTGAGCCCAACCTGAAGCTGCGCTATAAGCCCAAGAAGTCCCTGGAGCGGA
GGAAGAATCCACTGCTCCGAAAGGAGAGTGCGCCCCAGCCTCCGGCGGCGGCCCGAG
AGACCCTCGGAGACTCCTCCCAAGTAGTAGCAGCAGCCCGCATCAGGGTGCAGTCCC
CCAATGACAGCGAGCAGGCCCAATCCCATCCTGGGCTCGGAGGCTGACAGTGACCGCA
GGACCCATCCGACTCTGGGCCCTCGGGGGCCAATCCTGGGGAGCCCCACACTCCCCTCT
TCCTGCCCATGGCTTGGAGCCCCGAGGCTGGGGGACCTTGCCCTCTCGCCTGCAGCCCA
CCTTGCCCTTCCACTTTGCCAGTCTTAATGACCACCGAGCGGCTCTCTGGGTGAGGCC
TCCACTGGCCACTGAGCCGACTCGCTCAGAGCCCTGCCCCCCAGTGCCACCGTCCCC
CACCGCCGGGCCATGCAGCCCCGCTGGAGCAGCTCAAACTCACGTCCAGGTGATCA
AGAGGTGAGCCAAGCCGAGTGAGAAGCCCCGGCTGCGGCAGATACCCTCGGCTGAAGACC
TGGAGACAGATGGCGGGGACCGGGCCAGGTGGTGGACGATGGCCTGGAGCACAGGGAGC
TGGCCATGGGCAGCCTGAGGCCAGAGGCCCGCTCCTCTCCAGCAGCACCTCAGGTGT
TGCTCTGGGAACAGCAGGACTGGCTGGCGGCTCCCCGGGCGAGCCGGGGACTG
TGCTGTTCTCTGGCCAGGTGGGCACCGGCTCTGTCCCGGCTCAGTCTTCCCAG



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CCGCACCTGCCTCACTGTGAGCCAGAGCCTGCCAGCCAGGCCGAGTCTCTCCAGCT
 CAGAGACCCTGCCAGGACCCTGCCCTTACCACAGGGCTGATCTATGACTCGGTCATGC
 TGAAGCACCAGTGCTCCTGCGGTGACAACAGCAGGCACCCGGAGCACGCCGGCCGATCC
 AGAGCATCTGGTCCCGGCTGCAGGAGCGGGGGCTCCGGAGCCAGTGTGAGTGTCTCCGAG
 GCCGGAAGGCCTCCCTGGAAGAGCTGCAGTCCGCTCACTCTGAGCGGCACGTGCTCCTCT
 ACGGCACCAACCCGCTCAGCCGCTCAAACCTGGACAACGGGAAGCTGGCAGGGCTCCTGG
 CACAGCGGATGTTTGTGATGCTGCCCTGTGGTGGGGTTGGGGTGGACACTGACACCATCT
 GGAATGAGCTTCAATTCCTCCAATGCAGCCGCTGGGCCGCTGGCAGTGTACTGACCTCG
 CCTTCAAAGTGGCTTCTCGTGAGCTAAAGAATGTTTTGCTGTGGTGGCGCCCCAGGAC
 ACCATGCAGATCATTCAACAGCCATGGGCTTCTGCTTCTTCAAACCTCAGTGGCCATCGCT
 GCCGGCAGCTGCAACAGCAGAGCAAGGCCAGCAAGATCCTCATTGTAGACTGGGACGTGC
 ACCATGGCAACGGCACCCAGCAAACCTTCTACCAAGACCCAGTGTGCTTACATCTCCC
 TGCATCGCCATGACGACGGCAACTTCTCCCGGGGAGTGGGGCTGTGGATGAGGTAGGGG
 CTGGCAGCGGTGAGGGCTTCAATGTCAATGTGGCCTGGGCTGGAGGTCTGGACCCCCCA
 TGGGGGATCCTGAGTACCTGGCTGCTTTCAGGATAGTCGTGATGCCCATGCCCGAGAGT
 TCTCTCCAGACCTAGTCTGGTGTCTGCTGGATTTGATGTGCTGAGGGTCAACCGGCC
 CACTGGGTGGCTACCATGTTTTGCCAAATGTTTTGGATACATGACGCAGCAACTGATGA
 ACCTGGCAGGAGGCGCAGTGGTGTGGCCTTGGAGGGTGGCCATGACCTCACAGCCATCT
 GTGACGCCTCTGAGGCCTGTGTGGCTGCTTCTGGGTAACAGGGTGGATCCCCTTTAG
 AAGAAGGCTGAAACAGAAACCAACCTCAATGCCATCCGCTCTCTGGAGGCCGTGATCC
 GGGTGCACAGTAAATACTGGGGCTGCATGCAGCGCCTGGCCTCCTGTCCAGACTCCTGGG
 TGCCTAGAGTGCAGGGGCTGACAAAGAAGAAGTGGAGGCAGTGACCGCACTGGCGTCCC
 TCTGTGGGCATCCTGGCTGAAGATAGGCCCTCGGAGCAGCTGGTGGAGGAGGAAGAAC
 CTATGAATCTCTAAGGCTCTGGAACCATCTGCCCGCCACCATGCCCTTGGGACCTGGTT
 CTCTTCTAACCCCTGGCAATAGCCCCATTCTGGGTCTTTAGAGATCCTGTGGGCAAGT
 AGTTGGAACCAGAGAACAGCCTGCCTGCTTTGACAGTTATCCCAGGGAGCGTGAGAAAAT
 CCCTGGGTCTAGAATGGGAACCTGGAGAGGACCCTGAGAGGAGACGGGCTGGCGGGCACC
 CCCACAGGGCTCTCGAGAACAGATTCTCCCTCCAGTATGGGCCCTGGCTGTGGCCCCCA
 TTCCTCAGGACTGCACAGAGGAGGACTGGCTCCGGCTCCGTGGGCTCACCTTAACCAC
 TATTCCTGGCTCTGCAAACCCAGACTTTCACACAGCCCCAGGCTCCACACAGAAATGT
 GAACCTGGCCTCAGACAGGCTGGCCCTTCTAGGCTCTAGGGGCTAGGGGGGAGTGGGA
 GCCAAGAGGTCCCATATTCCTGAGTGCAGGGGTAGTCCCTCTCACCTGCTTCTCAGACG
 ACTCTGGAAGCTT

Restriction Sites: Please inquire
ACCN: NM_001098416
Insert Size: 3500 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](#)

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001098416.1](#), [NP_001091886.1](#)

RefSeq Size: 4084 bp

RefSeq ORF: 2865 bp

Locus ID: 51564

UniProt ID: [Q8WU14](#)

Cytogenetics: 12q13.11

Protein Families: Druggable Genome, Transcription Factors

Gene Summary:

Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene has sequence homology to members of the histone deacetylase family. This gene is orthologous to mouse HDAC7 gene whose protein promotes repression mediated via the transcriptional corepressor SMRT. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (4) lacks an alternate in-frame exon in the mid-coding region, compared to variant 1. The resulting isoform (d) has the same N- and C-termini but is shorter than isoform a.