

Product datasheet for **RG215297**

HDAC7 (NM_001098416) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC7 (NM_001098416) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HDAC7
Synonyms:	HD7; HD7A; HDAC7A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG215297 representing NM_001098416
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCACAGCCCCGGCGCTGATGGGACCCAGGTGAGCCCCGGTGCCCACTACTGCAGCCCCACTGGCGCAG
 GCTGCCCCAGGCCTGTGCAGACACACCAGGCCCTCAGCCGACGCCCATGGACCTGCGGGTGGCCAGCG
 GCCCCAGTGGAGCCCCACCAGAGCCACATTGCTGGCCCTGCAGCGTCCCCAGCGCTGCACCCACAC
 CTCTTCTAGCAGGCCTGCAGCAGCAGCGCTCGGTGGAGCCCATGAGGCTCTCCATGGACACGCCGATGC
 CCGAGTTGCAGGTGGGACCCAGGAACAAGAGCTGCGGCAGTCTTCCACAAGGACAAGAGCAAGCGAAG
 TGCTGTAGCCAGCAGCGTGGTCAAGCAGAAGCTAGCGGAGGTGATTCTGAAAAACAGCAGGCGGCCCTA
 GAAAGAACAGTCCATCCCAACAGCCCCGGCATTCCCTACAGAACCCTGGAGCCCCGGAGACGGAAGGAG
 CCACCCGCTCCATGCTCAGCAGCTTTTTGCCTCCTGTTCCAGCCTGCCAGTGACCCCCAGAGCACTT
 CCCTCTGCGCAAGACAGTCTCTGAGCCCAACCTGAAGCTGCGCTATAAGCCCAAGAAGTCCCTGGAGCGG
 AGGAAGAATCCACTGCTCCGAAAGGAGAGTGGCCCCCAGCCTCCGGCGCGGCCCGCAGAGACCCCTCG
 GAGACTCTCCCCAAGTAGTAGCAGCACGCCCGCATCAGGGTGCAGCTCCCCAATGACAGCGAGACCGG
 CCCAATCCCATCCTGGGCTCGGAGGCTGACAGTGACCGCAGGACCCATCCGACTCTGGGCCCTCGGGGG
 CCAATCCTGGGGAGCCCCACACTCCCCCTTCTGCCCCATGGCTTGGAGCCGAGGCTGGGGGCACCT
 TGCCCTCTCGCCTGCAGCCATTCTCTCTGGACCCCTCAGGCTCTCATGCCCGCTGCTGACTGTGCC
 CGGGCTTGGGCCCTTGCCTTCCACTTTGCCAGTCTTAATGACCACCGAGCGGCTCTCTGGGTGAGGC
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 GCCCATGCAGCCCCGCTGGAGCAGTCAAAACTCACGTCCAGTGATCAAGAGGTGAGCAAGCCGAG
 TGAGAAGCCCCGGCTGCGGCAGATACCCTCGGCTGAAGACCTGGAGACAGATGGCGGGGACCGGGCCAG
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 TCCAGCAGCACCCCTCAGGTGTTGCTCTGGGAACAGCAGCGACTGGCTGGGCGGCTCCCCGGGGCAGCAC
 CGGGGACACTGTGCTGCTTCTCTGGCCAGGGTGGGACCGGCTCTGTCCCGGCTCAGTCTTCCCCA
 GCCGCACCTGCCTCACTGTGAGCCAGAGCCTGCCAGCCAGGCCGAGTCTCTCCAGCTCAGAGACCC
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 GGGCTCCGGAGCCAGTGTGAGTGTCTCCGAGGCCGGAAGGCTCCCTGGAAGAGTGCAGTCCGTTCCACT
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 AGGGCTCCTGGCACAGCGGATGTTTGTGATGCTGCCCTGTGGTGGGGTGGGGTGGACACTGACACCATC
 TGGAAATGAGTTCATTCTCCAATGCAGCCCGTGGGCCGCTGGCAGTGTCACTGACCTCGCCTTCAAAG
 TGGCTTCTCGTAGCTAAAGAATGGTTTCGCTGTGGTGGGCCCCAGGACACCATGCAGATCATTCAAC
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 GTGCTTAGAGTGCAGGGGCTGACAAAGAAGAAGTGGAGGCAAGTACCGCACTGGCGTCCCTCTGTGG
 GCATCCTGGCTGAAGATAGGCCCTCGGAGCAGCTGGTGGAGGAGAAGAACCTATGAATCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG215297 representing NM_001098416
 Red=Cloning site Green=Tags(s)

MHSPGADGTQVSPGAHYCSPTGAGCPRPCADTPGPPQPMDLRVGQRPPVEPPPEPTLLALQRPQRLHHH
 LFLAGLQQRSVEPMRLSMDTPMPELVGPEQELRQLLHKDKSKRSVAVSSVVKQLAEVILKKQQAAL
 ERTVHPNSPGIPYRTLEPLETEGATRSMSSFLPPVPSLPSDPPEHFPLRKTVPENLKLRYKPKKSLER
 RKNPLLRKESAPPSLRRRPAETLGDSSPSSSTPASGCSPPNDSEHGPNPILGSEADSDRRTHPTLGPGR
 PILGSPHTPLFLPHGLEPEAGGTLPSRLQPILLDDPSGSHAPLLTYPGLGPLPFHFQSLMTTERLSGSG
 LHWPLSRTRSEPLPPSATAPPPGPMQPRLEQLKTHVQVIKRSAPSEKPRLRQIPSAEDLETGGGPGQ
 VVDDGLEHRELGHGQPEARGPAPLQQHPQVLLWEQQRLAGRLPRGSTGDTVLLPLAQGGHRPLSRAQSSP
 AAPASLSAPEPASQARVLSSETPARTLPFTTGLIYDSVMLKHQCSCGDNSRHPEHAGRIQSIWSRLQER
 GLRSQCECLRGRKASLEELQSVHSEHVLLYGTNPLSRLKLDNGKLAGLLAQRMFVMLPCGGVGVDTDTI
 WNELHSSNAARWAAGSVTDLAFKVASRELKNGFAVVRPPGHHADHSTAMGFCFFNSVAIACRQLQQSKA
 SKILIVDWDVHHNGTQQTFYQDPSVLYISLHRHDDGNFFPGSGAVDEVGAGSGEGFNVNAWAGGLDPP
 MGDPEYLAAFRIVVMPIAREFSPDLVLSAGFDDAEGHPAPLGGYHVSACFCGYMTQQLMNLAGGAVVLA
 LEGGHDLTAICDASEACVAALLGNRVDPLSEEGWKQKPNLNAIRSLEAVIRVHSKYWGCMQRLASCPSDW
 VPRVPGADKEEVEAVTALASLSVGILAE DRPSEQLVEEEPMNL

TRTRPLE - GFP Tag - V

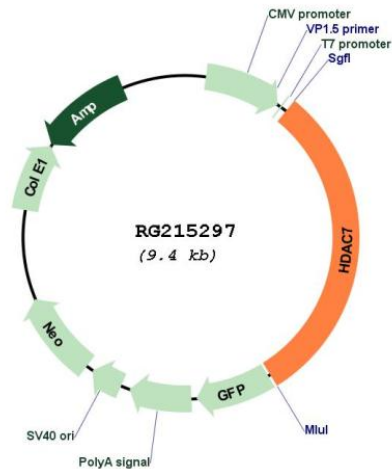
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001098416

ORF Size: 2862 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 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:	<u>NM_001098416.4</u>
RefSeq Size:	4190 bp
RefSeq ORF:	2865 bp
Locus ID:	51564
UniProt ID:	<u>Q8WUI4</u>
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]