

Product datasheet for **RC213214**

HDAC7A (NM_016596) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC7A (NM_016596) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HDAC7A
Synonyms:	HD7; HD7A; HDAC7A
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RC213214 representing NM_016596
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACCTGCGGGTGGGCCAGCGCCCCAGTGGAGCCCCACCAGGCCACATTGCTGGCCCTGCAGC
GTCCCCAGCGCCTGCACCACCACCTCTTCTAGCAGGCCTGCAGCAGCAGCGCTCGGTGGAGCCCATGAG
GCTCTCCATGGACACGCCGATGCCCGAGTTGCAGGTGGGACCCAGGAACAAGAGCTGCGCAGCTTCTC
CACAAGGACAAGAGCAAGCGAAGTGTGTAGCCAGCAGCGTGGTCAAGCAGAAGCTAGCGGAGGTGATTC
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CCCCGGGCGAGCACCGGGGACACTGTGCTGCTTCTCTGGCCAGGGTGGGCACCGGCTCTGTCCCGG
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CTTCTACCAAGACCCAGTGTGCTTACATCTCCCTGCATCGCCATGACGACGGCAACTTCTTCCCGGG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213214 representing NM_016596
 Red=Cloning site Green=Tags(s)

MDLRVGRPPVEPPPEPTLLALQRPQLHHHLFLAGLQQRSVEPMRLSMDTPMPELQVGPQEQLRQLL
 HKDKSKRSVAVSSVVKQLAEVILKKQQAALERTVHPNSPGIPYRTLEPLETEGATRSMSSFLPPVPSL
 PSDPPEHFPLRKTVSEPNLKLRYKPKKSLERRKNPLLRKESAPPSLRRRPAETLGDSSPSSSTPASGCS
 SPNDSEHGPNPILGSDRRRTHPTLGPGRPILGSPHTPLFLPHGLEPEAGGTLPSRLQPIILLDDPSGSHAP
 LLTVPLGLPLPFHFAQSLMTTERLSGSLHWPLSRTRSEPLPPSATAPPPGPMQPRLEQLKTHVQVIKR
 SAKPSEKPRLRQIPSAEDLETDGGGPGQVVDGLEHRELGHGQPEARGPAPLQQHPQVLLWEQQRLAGRL
 PRGSTGDTVLLPLAQGGHRPLSRAQSSPAAPASLSAEPASQARVLSSEETPARTLPFTTGLIYDSVMLK
 HQCSCGDNRSRHEHAGRIQSIWSRLQERGLRSQCECLGRKASLEELQSVHSEHVLLYGTNPLSRLKLD
 NGKLAGLLAQRMFVMLPCGGVGVDTDTIWNELHSSNAARWAAGSVTDLAFKVASRELKNGFAVVRPPGHH
 ADHSTAMGFCFFNSVAIACRQLQQQSKASKILIVDWDVHHGNGTQQTFYQDPSVLYISLHRHDDGNFFPG
 SGAVDEVGAGSGEGFNVNVAWAGGLDPPMGDPEYLAAFRIVVMPIAREFSPDLVLSAGFDAEAGHPAPL
 GGYHVSACFGYMTQQLMNLGAGAVVLALEGGHDLTAICDASEACVAALLGNRVDPVLEEGWKQKPNLNA
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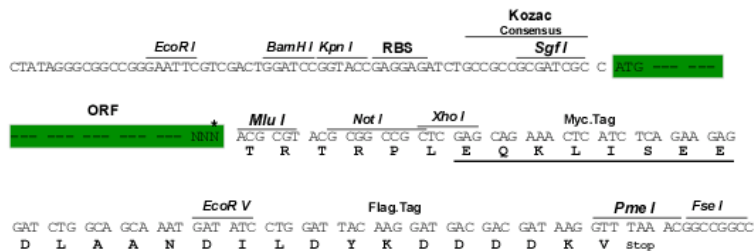
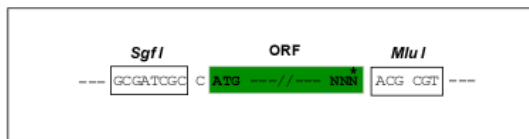
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6253_a04.zip

Restriction Sites: SgfI-MluI

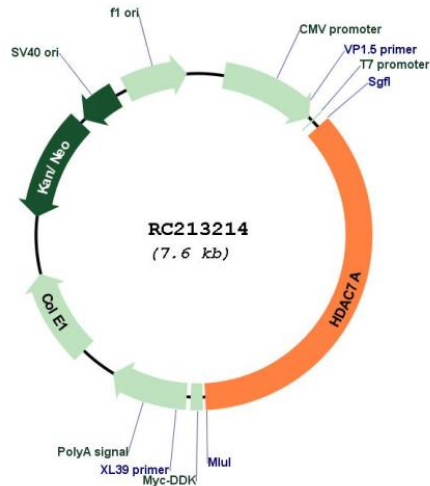
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_016596

ORF Size: 2736 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.

RefSeq: [NM_016596.2](#), [NP_057680.2](#)

RefSeq Size: 4086 bp

RefSeq ORF: 2747 bp

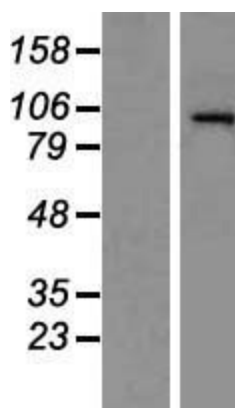
Locus ID: 51564

Protein Families: Druggable Genome, Transcription Factors

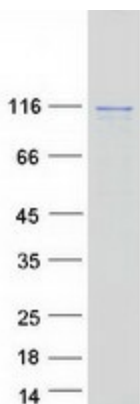
MW: 99.5 kDa

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]

Product images:

Western blot validation of overexpression lysate (Cat# [LY413836]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213214 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HDAC7A protein (Cat# [TP313214]). The protein was produced from HEK293T cells transfected with HDAC7A cDNA clone (Cat# RC213214) using MegaTran 2.0 (Cat# [TT210002]).