OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG213214

HDAC7A (NM_016596) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC7A (NM_016596) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HDAC7A
Synonyms:	HD7; HD7A; HDAC7A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG213214 representing NM_016596
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACCTGCGGGTGGGCCAGCGGCCCCCAGTGGAGCCCCCACCAGAGCCCACATTGCTGGCCCTGCAGC
GTCCCCAGCGCCTGCACCACCACCTCTTCCTAGCAGGCCTGCAGCAGCAGCGCTCGGTGGAGCCCATGAG
GCTCTCCATGGACACGCCGATGCCCGAGTTGCAGGTGGGACCCCAGGAACAAGAGCTGCGGCAGCTTCTC
CACAAGGACAAGAGCAAGCGAAGTGCTGTAGCCAGCAGCGTGGTCAAGCAGAAGCTAGCGGAGGTGATTC
TGAAAAAACAGCAGGCGGCCCTAGAAAGAACAGTCCATCCCAACAGCCCCGGCATTCCCTACAGAACCCT
GGAGCCCCTGGAGACGGAAGGAGCCACCCGCTCCATGCTCAGCAGCTTTTTGCCTCCTGTTCCCAGCCTG
CCCAGTGACCCCCCAGAGCACTTCCCTCTGCGCAAGACAGTCTCTGAGCCCAACCTGAAGCTGCGCTATA
AGCCCAAGAAGTCCCTGGAGCGGAGGAAGAATCCACTGCTCCGAAAGGAGAGTGCGCCCCCCAGCCTCCG
GCGGCGGCCCGCAGAGACCCTCGGAGACTCCTCCCCAAGTAGTAGCAGCACGCCCGCATCAGGGTGCAGC
TCCCCCAATGACAGCGAGCACGGCCCCAATCCCATCCTGGGCGACAGTGACCGCAGGACCCATCCGACTC
TGGGCCCTCGGGGGCCAATCCTGGGGAGCCCCCACACTCCCCTCTTCCTGCCCCATGGCTTGGAGCCCGA
GGCTGGGGGCACCTTGCCCTCTCGCCTGCAGCCCATTCTCCTCCTGGACCCCTCAGGCTCTCATGCCCCG
CTGCTGACTGTGCCCGGGCTTGGGCCCTTGCCCTTCCACTTTGCCCAGTCCTTAATGACCACCGAGCGGC
TCTCTGGGTCAGGCCTCCACTGGCCACTGAGCCGGACTCGCTCAGAGCCCCTGCCCCCCAGTGCCACCGC
TCCCCCACCGCCGGGCCCCATGCAGCCCCGCCTGGAGCAGCTCAAAACTCACGTCCAGGTGATCAAGAGG
TCAGCCAAGCCGAGTGAGAAGCCCCGGCTGCGGCAGATACCCTCGGCTGAAGACCTGGAGACAGATGGCG
GGGGACCGGGCCAGGTGGTGGACGATGGCCTGGAGCACAGGGAGCTGGGCCATGGGCAGCCTGAGGCCAG
AGGCCCCGCTCCTCTCCAGCAGCACCCTCAGGTGTTGCTCTGGGAACAGCAGCGACTGGCTGGGCGGCTC
CCCCGGGGCAGCACCGGGGACACTGTGCTGCTTCCTCTGGCCCAGGGTGGGCACCGGCCTCTGTCCCGGG
CTCAGTCTTCCCCAGCCGCACCTGCCTCACTGTCAGCCCCAGAGCCTGCCAGCCAGGCCCGAGTCCTCTC
CAGCTCAGAGACCCCTGCCAGGACCCTGCCCTTCACCACAGGGCTGATCTATGACTCGGTCATGCTGAAG
CACCAGTGCTCCTGCGGTGACAACAGCAGGCACCCGGAGCACGCCGGCCGCATCCAGAGCATCTGGTCCC
GGCTGCAGGAGCGGGGGCTCCGGAGCCAGTGTGAGTGTCTCCGAGGCCGGAAGGCCTCCCTGGAAGAGCT
GCAGTCGGTCCACTCTGAGCGGCACGTGCTCCTCTACGGCACCAACCCGCTCAGCCGCCTCAAACTGGAC
AACGGGAAGCTGGCAGGGCTCCTGGCACAGCGGATGTTTGTGATGCTGCCCTGTGGTGGGGTTGGGGTGG
ACACTGACACCATCTGGAATGAGCTTCATTCCTCCAATGCAGCCCGCTGGGCCGCTGGCAGTGTCACTGA
CCTCGCCTTCAAAGTGGCTTCTCGTGAGCTAAAGAATGGTTTCGCTGTGGTGCGGCCCCCAGGACACCAT
GCAGATCATTCAACAGCCATGGGCTTCTGCTTCTTCAACTCAGTGGCCATCGCCTGCCGGCAGCTGCAAC
AGCAGAGCAAGGCCAGCAAGATCCTCATTGTAGACTGGGACGTGCACCATGGCAACGGCACCCAGCAAAC
CTTCTACCAAGACCCCAGTGTGCTCTACATCTCCCTGCATCGCCATGACGACGGCAACTTCTTCCCGGGG
AGTGGGGCTGTGGATGAGGTAGGGGCTGGCAGCGGTGAGGGCTTCAATGTCAATGTGGCCTGGGCTGGAG
GTCTGGACCCCCCCATGGGGGATCCTGAGTACCTGGCTGCTTTCAGGATAGTCGTGATGCCCATCGCCCG
AGAGTTCTCTCCAGACCTAGTCCTGGTGTCTGCTGGATTTGATGCTGCTGAGGGTCACCCGGCCCCACTG
GGTGGCTACCATGTTTCTGCCAAATGTTTTGGATACATGACGCAGCAACTGATGAACCTGGCAGGAGGCG
CAGTGGTGCTGGCCTTGGAGGGTGGCCATGACCTCACAGCCATCTGTGACGCCTCTGAGGCCTGTGTGGC
TGCTCTTCTGGGTAACAGGGTGGATCCCCTTTCAGAAGAAGGCTGGAAACAGAAACCCAACCTCAATGCC
ATCCGCTCTCTGGAGGCCGTGATCCGGGTGCACAGTAAATACTGGGGCTGCATGCAGCGCCTGGCCTCCT
GTCCAGACTCCTGGGTGCCTAGAGTGCCAGGGGCTGACAAAGAAGAAGTGGAGGCAGTGACCGCACTGGC
GTCCCTCTCTGTGGGCATCCTGGCTGAAGATAGGCCCTCGGAGCAGCTGGTGGAGGAGGAAGAACCTATG
AATCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

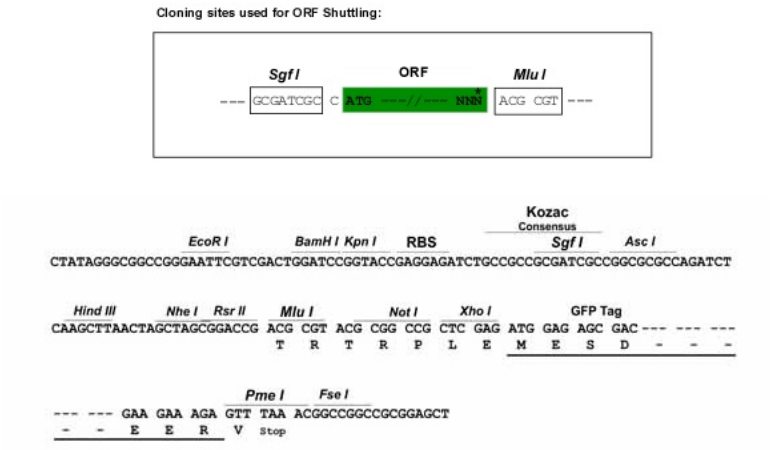
>RG213214 representing NM_016596
Red=Cloning site Green=Tags(s)

MDLRVGQRPPVEPPPEPTLLALQRPQRLHHHLFLAGLQQQRSVEPMRLSMDTPMPELQVGPQEQELRQLL
HKDKSKRSAVASSVVKQKLAEVILKKQQAALERTVHPNSPGIPYRTLEPLETEGATRSMLSSFLPPVPSL
PSDPPEHFPLRKTVSEPNLKLRYKPKKSLERRKNPLLRKESAPPSLRRRPAETLGDSSPSSSSTPASGCS
SPNDSEHGPNPILGDSDRRTHPTLGPRGPILGSPHTPLFLPHGLEPEAGGTLPSRLQPILLLDPSGSHAP
LLTVPGLGPLPFHFAQSLMTTERLSGSGLHWPLSRTRSEPLPPSATAPPPPGPMQPRLEQLKTHVQVIKR
SAKPSEKPRLRQIPSAEDLETDGGGPGQVVDDGLEHRELGHGQPEARGPAPLQQHPQVLLWEQQRLAGRL
PRGSTGDTVLLPLAQGGHRPLSRAQSSPAAPASLSAPEPASQARVLSSSETPARTLPFTTGLIYDSVMLK
HQCSCGDNSRHPEHAGRIQSIWSRLQERGLRSQCECLRGRKASLEELQSVHSERHVLLYGTNPLSRLKLD
NGKLAGLLAQRMFVMLPCGGVGVDTDTIWNELHSSNAARWAAGSVTDLAFKVASRELKNGFAVVRPPGHH
ADHSTAMGFCFFNSVAIACRQLQQQSKASKILIVDWDVHHGNGTQQTFYQDPSVLYISLHRHDDGNFFPG
SGAVDEVGAGSGEGFNVNVAWAGGLDPPMGDPEYLAAFRIVVMPIAREFSPDLVLVSAGFDAAEGHPAPL
GGYHVSAKCFGYMTQQLMNLAGGAVVLALEGGHDLTAICDASEACVAALLGNRVDPLSEEGWKQKPNLNA
IRSLEAVIRVHSKYWGCMQRLASCPDSWVPRVPGADKEEVEAVTALASLSVGILAEDRPSEQLVEEEEPM
NL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

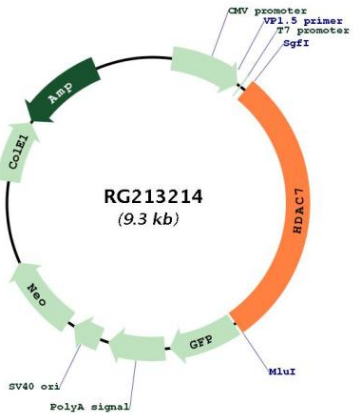
Cloning Scheme:



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.
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_016596.2, NP_057680.2
RefSeq Size:	4086 bp
RefSeq ORF:	2747 bp
Locus ID:	51564
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]

Product images:



Circular map for RG213214