

## Product datasheet for **SC124679**

### HDAC7A (NM\_016596) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC7A (NM_016596) Human Untagged Clone
Tag:	Tag Free
Symbol:	HDAC7A
Synonyms:	HD7; HD7A; HDAC7A
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL6</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC124679 sequence for NM\_016596 edited (data generated by NextGen Sequencing)

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ATGGACCTGCGGGTGGGCCAGCGGCCCCAGTGGAGCCCCACCAGAGCCCACATTGCTG
GCCCTGCAGCGTCCCCAGCGCTGCACCACCACCTCTTCTAGCAGGCCTGCAGCAGCAG
CGCTCGGTGGAGCCCATGAGGCTCTCCATGGACACGCCGATGCCCGAGTTGCAGGTGGGA
CCCCAGGAACAAGAGCTGCGGCAGCTTCTCCACAAGGACAAGAGCAAGCGAAGTGCTGTA
GCCAGCAGCGTGGTCAAGCAGAAGCTAGCGGAGGTGATTCTGAAAAACACGAGGGGCC
CTAGAAAAGAACAGTCCATCCCAACAGCCCCGGCATTCCCTACAGAACCCTGGAGCCCTG
GAGACGGAAGGAGCCACCCGCTCCATGCTCAGCAGCTTTTTGCCTCTGTCCCAGCCTG
CCCAGTGACCCCCAGAGCACTTCCCTCTGCGCAAGACAGTCTCTGAGCCCAACCTGAAG
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AGTGGCCCCCAGCCTCCGGCGGCGGCCCGCAGAGACCCTCGGAGACTCTCCCAAGT
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CCCATCTGGGCTCGGAGGCTGACAGTGACCGCAGGACCATCCGACTCTGGGCCCTCGG
GGCCAATCCTGGGGAGCCCCACACTCCCTCTTCTGCCCCATGGCTTGAGCCCGAG
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GGCGGGCTCCCCGGGGCAGCACCGGGGACACTGTGCTGCTTCCCTTGGCCAGGGTGGG
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AACTGGACAACGGGAAGCTGGCAGGGCTCCTGGCACAGCGGATGTTTGTGATGTGCC
TGTGGTGGGGTTGGGGTGGACACTGACACCATCTGGAATGAGCTTCACTCCTCAATGCA
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GCTGGATTTGATGCTGCTGAGGGTACCCGGCCCCACTGGGTGGTACCATGTTTCTGCC
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GCTCTTCTGGGTAACAGGGTGGATCCCCTTTCAAGAAGAAGGCTGGAAACAGAAACCAAC
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ATGCAGCGCCTGGCCTCCTGTCCAGACTCCTGGGTGCCTAGAGTGCCAGGGGCTGACAAA
GAAGAAGTGGAGGCAGTGACCGCACTGGCGTCCCTCTCTGTGGGCATCCTGGCTGAAGAT
AGGCCCTCGGAGCAGCTGGTGGAGGAGGAAGAACCTATGAATCTCTAA

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Clone variation with respect to NM\_016596.3

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_016596 unedited CCCCCGCCCGTTGCCGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAG AGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTTGCAGCGGCCGCGAA TTCGGCACGAGGCCGGCGACTGGGGGATGTGAGGCCGGCGCCCCAGCCCCCGCCCCG CATGAGCCCCCGCTCTGAGGGCCCCGGCCCTGGATGCACAGCCCCGGCGCTGATGGGA CCCAGGTGAGCCCGGGTGCCTACTGACAGCCCCACTGGCGCAGGCTGCCCCAGGCCCT GTGCAGACACACCAGGCCCTCAGCCGACGCCATGGACCTGCGGGTGGCCAGCGGCCCC CAGTGGAGCCCCACCAGAGCCACATTGCTGGCCCTGCAGCGTCCCCAGCGCCTGCACC ACCACCTCTTCTAGCAGCCTGCAGCAGCAGCGCTCGGTGGAGCCCATGAGGCTCTCCA TGGACACGCCGATGCCCGAGTTGCAGGTGGGACCCAGGAACAAGAGCTGCGGCAGCTTC TCCACAAGGACAAGAGCAAGCGAAGTGCTGTAGCCAGCAGCGTGGTCAAGCAGAAGCTAG CGGAGGTGATTCTGAAAAACAGCAGGCCGCCCTAGAAAGAACAGTCCATCCCAACAGCC CCGGCATTCCCTACAGAACCCTGGAGCCCTGGAGACGGGAGGAGCCACCCGCTNCATGC TCAGCAGTNTNTGCCTCTGTCCAGCCTGCCAGTGACCCCCAGAGCACTTCCTT CTGCGCAGACAGTCTCTGAGCCACCTNGAGCTGCGCTATAGNCCCAGAGTCTTGAGC GGNAGGAGAATCACTGCTCCGAAGGAGATGCGCCCCAGCTCCGNNCGGCCGCAAGACC CTCGGGACTCTCCCCAGTAGTACAGCCCGCATCAGGGTGCCTTCCCCATGACGCGACA CGCCATCTCTGGGTTCTG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_016596
<b>Insert Size:</b>	4100 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_016596.2</a> , <a href="#">NP_057680.2</a>
<b>RefSeq Size:</b>	4086 bp
<b>RefSeq ORF:</b>	2739 bp
<b>Locus ID:</b>	51564
<b>Cytogenetics:</b>	12q13.11
<b>Protein Families:</b>	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 (2) differs in the 5' UTR and coding region and lacks an alternate in-frame exon compared to variant 3. The resulting isoform (b) is shorter at the N-terminus and lacks an internal segment compared to isoform c.