

## Product datasheet for **RC218536**

### HDAC10 (NM\_032019) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC10 (NM_032019) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HDAC10
Synonyms:	HD10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RC218536 representing NM\_032019  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGGACCGCGCTTGTGTACCATGAGGACATGACGGCCACCCGGCTGCTCTGGGACGACCCCGAGTGCG  
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**Protein Sequence:** >RC218536 representing NM\_032019  
Red=Cloning site Green=Tags(s)

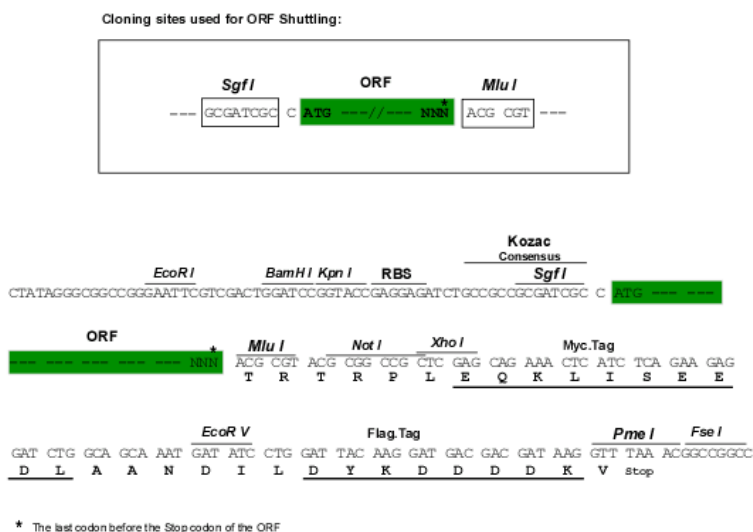
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6163\\_f07.zip](https://cdn.origene.com/chromatograms/mk6163_f07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



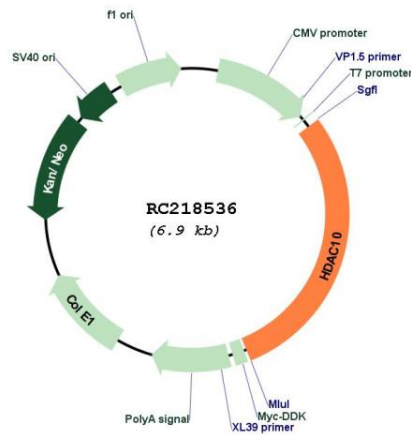
**ACCN:** NM\_032019

**ORF Size:** 2007 bp

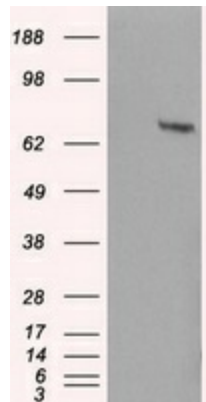
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_032019.6</a>
<b>RefSeq Size:</b>	2702 bp
<b>RefSeq ORF:</b>	2010 bp
<b>Locus ID:</b>	83933
<b>UniProt ID:</b>	<a href="#">Q969S8</a>
<b>Cytogenetics:</b>	22q13.33
<b>Domains:</b>	Hist_deacetyl
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>MW:</b>	71.3 kDa

**Gene Summary:**

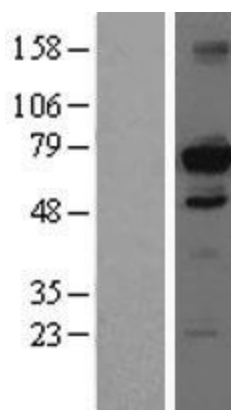
The protein encoded by this gene belongs to the histone deacetylase family, members of which deacetylate lysine residues on the N-terminal part of the core histones. Histone deacetylation modulates chromatin structure, and plays an important role in transcriptional regulation, cell cycle progression, and developmental events. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011]

**Product images:**


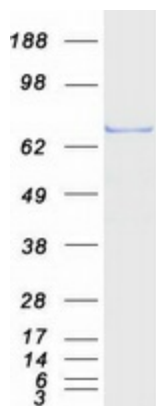
Circular map for RC218536



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HDAC10 (Cat# RC218536, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HDAC10 (Cat# [TA500751]). Positive lysates [LY403142] (100ug) and [LC403142] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403142]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218536 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HDAC10 protein (Cat# [TP318536]). The protein was produced from HEK293T cells transfected with HDAC10 cDNA clone (Cat# RC218536) using MegaTran 2.0 (Cat# [TT210002]).