

Product datasheet for **RG201745**

HDAC1 (NM_004964) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC1 (NM_004964) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HDAC1
Synonyms:	GON-10; HD1; KDAC1; RPD3; RPD3L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG201745 representing NM_004964
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCAGACGCAGGGCACCCGGAGGAAAGTCTGTTACTACTACGACGGGGATGTTGAAATTACTATT
 ATGGACAAGGCCACCAATGAAGCCTCACGAATCCGCATGACTCATAATTTGCTGCTCAACTATGGTCT
 CTACCGAAAAATGAAATCTATCGCCCTCACAAAGCCAATGCTGAGGAGATGACCAAGTACCACAGCGAT
 GACTACATTAATTTCTTGCCTCCATCCGTCCAGATAACATGTCGGAGTACAGCAAGCAGATGCAGAGAT
 TCAACGTTGGTGGAGACTGTCCAGTATTCGATGGCCTGTTTGTGTTCTGTGAGTTGTCTACTGGTGGTTC
 TGTGGCAAGTGTGTGAACTTAATAAGCAGCAGACGGACATCGTGTGAATTGGGCTGGGGCCTGCAC
 CATGCAAAGAAGTCCGAGGCATCTGGCTTCTGTTACGTCAATGATATCGTCTTGGCCATCCTGGAAGTGC
 TAAAGTATCACCAGGGGTGCTGTACATTGACATTGATATCACCATGGTACGGCGTGGAGAGGCCCTT
 CTACACCACGGACCGGTGATGACTGTGTCTTTTCATAAGTATGGAGAGTACTTCCAGGAACTGGGGAC
 CTACGGGATATCGGGGCTGGCAAAGCAAGTATTATGCTGTTAACTACCCGCTCCGAGACGGGATTGATG
 ACGAGTCTATGAGGCCATTTTCAAGCCGGTATGTCCAAGTAATGGAGATGTTCCAGCCTAGTGCCGT
 GGTCTTACAGTGTGGCTCAGACTCCCTATCTGGGGATCGGTTAGGTTGCTTCAATCTAACTATCAAAGGA
 CACGCCAAGTGTGTGAAATTTGTCAAGACTTTAACCTGCCTATGCTGATGCTGGGAGGCGGTGGTTACA
 CCATTCGTAACGTTGCCCGGTGCTGGACATATGAGACAGCTGTGGCCCTGGATACGGAGATCCCTAATGA
 GCTTCCATACAATGACTACTTTGAATACTTTGGACCAGATTTCAAGCTCCACATCAGTCTTCCAATATG
 ACTAACCAGAACCGAATGAGTACCTGGAGAAGATCAAACAGCGACTGTTTGGAACTTAGAATGCTGC
 CGCACACCTGGGGTCCAAATGCAGGCGATTCTGAGGACGCCATCCCTGAGGAGAGTGGCGATGAGGA
 CGAAGACGACCCTGACAAGCGCATCTCGATCTGCTCCTCTGACAAACGAATTGCCTGTGAGGAAGAGTTC
 TCCGATTTCTGAAGAGGAGGGAGAGGGGGCCGCAAGAAGTCTTCCAAGTCAAAAAAGCCAAAGAGAGTCA
 AAACAGAGGATGAAAAAGAGAAAGACCCAGAGGAGAAGAAAGAAGTACCAGGAGGAGAAAACCAAGGA
 GGAGAAGCCAGAAGCCAAAGGGGTCAAGGAGGAGTCAAGTTGGCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG201745 representing NM_004964
 Red=Cloning site Green=Tags(s)

MAQTQGTTRRKVCYYYDGDVGNYYYQGHPMKPHRIRMTHNLLLNLYGLYRKMEIYRPHKANAEEMTKYHSD
 DYIKFLRSIRPDNMSEYSKQMRFNVEDCPVFDGLFEFCQLSTGGSVASAVKLNKQQTDI AVNWAGGLH
 HAKKSEASGFVNDIVLAILELLKYHQRVLYIDIDIHHGDGVVEAFYTTDRVMTVSFHKYGEYFPGTGD
 LRDIGAGKGKYYAVNYPLRDGIDDESIEAIFKPVMSKVMEMFQPSAVVLQCGSDLSGDRLGCFNLTIKG
 HAKCVEFVKSFNLPMLMLGGGYTIRNVARCWYETAVALDTEIPNELPYNDYFEYFGPDFKLHISPSNM
 TNQNTNEYLEKIKQRLFENLRMLPHAPGVQMQAIPEDAIPESGDEDEDDPKRISICSSDKRIACEEEF
 SDSEEEGEGGRKNSSNFKKAKRVKTEDEKEKDPEEKKEVTEEEKTKEEKPEAKGVKEEVKLA

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_004964

ORF Size: 1446 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](#)

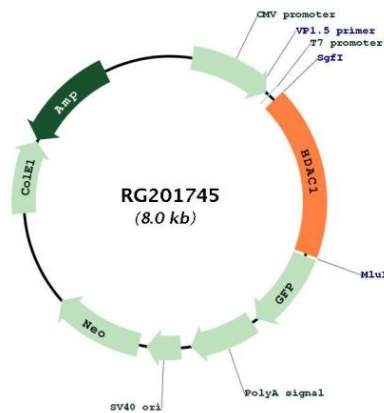
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_004964.3](#)
RefSeq Size: 2091 bp
RefSeq ORF: 1449 bp
Locus ID: 3065
UniProt ID: [Q13547](#)
Cytogenetics: 1p35.2-p35.1
Domains: Hist_deacetyl
Protein Families: Adult stem cells, Druggable Genome, Stem cell - Pluripotency, Stem cell relevant signaling - DSL/Notch pathway, Transcription Factors
Protein Pathways: Cell cycle, Chronic myeloid leukemia, Huntington's disease, Notch signaling pathway, Pathways in cancer
Gene Summary: Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG201745