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Product datasheet for SC117054

HDAC1 (NM_004964) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC1 (NM_004964) Human Untagged Clone
Tag:	Tag Free
Symbol:	HDAC1
Synonyms:	GON-10; HD1; KDAC1; RPD3; RPD3L1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF sequence for NM_004964 edited
ATGGCGCAGACGCAGGGCACCCGGAGGAAAGTCTGTTACTACTACGACGGGGATGTTGGA
AATTACTATTATGGACAAGGCCACCCAATGAAGCCTCACCGAATCCGCATGACTCATAAT
TTGCTGCTCAACTATGGTCTCTACCGAAAAATGGAAATCTATCGCCCTCACAAAGCCAAT
GCTGAGGAGATGACCAAGTACCACAGCGATGACTACATTAAATTCTTGCGCTCCATCCGT
CCAGATAACATGTCGGAGTACAGCAAGCAGATGCAGAGATTCAACGTTGGTGAGGACTGT
CCAGTATTCGATGGCCTGTTTGAGTTCTGTCAGTTGTCTACTGGTGGTTCTGTGGCAAGT
GCTGTGAAACTTAATAAGCAGCAGACGGACATCGCTGTGAATTGGGCTGGGGGCCTGCAC
CATGCAAAGAAGTCCGAGGCATCTGGCTTCTGTTACGTCAATGATATCGTCTTGGCCATC
CTGGAACTGCTAAAGTATCACCAGAGGGTGCTGTACATTGACATTGATATTCACCATGGT
GACGGCGTGGAAGAGGCCTTCTACACCACGGACCGGGTCATGACTGTGTCCTTTCATAAG
TATGGAGAGTACTTCCCAGGAACTGGGGACCTACGGGATATCGGGGCTGGCAAAGGCAAG
TATTATGCTGTTAACTACCCGCTCCGAGACGGGATTGATGACGAGTCCTATGAGGCCATT
TTCAAGCCGGTCATGTCCAAAGTAATGGAGATGTTCCAGCCTAGTGCGGTGGTCTTACAG
TGTGGCTCAGACTCCCTATCTGGGGATCGGTTAGGTTGCTTCAATCTAACTATCAAAGGA
CACGCCAAGTGTGTGGAATTTGTCAAGAGCTTTAACCTGCCTATGCTGATGCTGGGAGGC
GGTGGTTACACCATTCGTAACGTTGCCCGGTGCTGGACATATGAGACAGCTGTGGCCCTG
GATACGGAGATCCCTAATGAGCTTCCATACAATGACTACTTTGAATACTTTGGACCAGAT
TTCAAGCTCCACATCAGTCCTTCCAATATGACTAACCAGAACACGAATGAGTACCTGGAG
AAGATCAAACAGCGACTGTTTGAGAACCTTAGAATGCTGCCGCACGCACCTGGGGTCCAA
ATGCAGGCGATTCCTGAGGACGCCATCCCTGAGGAGAGTGGCGATGAGGACGAAGACGAC
CCTGACAAGCGCATCTCGATCTGCTCCTCTGACAAACGAATTGCCTGTGAGGAAGAGTTC
TCCGATTCTGAAGAGGAGGGAGAGGGGGGCCGCAAGAACTCTTCCAACTTCAAAAAAGCC
AAGAGAGTCAAAACAGAGGATGAAAAAGAGAAAGACCCAGAGGAGAAGAAAGAAGTCACC
GAAGAGGAGAAAACCAAGGAGGAGAAGCCAGAAGCCAAAGGGGTCAAGGAGGAGGTCAAG
TTGGCCTGA

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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004964 unedited
TTTAGNATTTGGCTACTATCATATAGGCGGCCCGCGATTCGGCACGAGGCTGACGGTAGG
GACGGGAGGCGAGCAAGATGGCGCAGACGCAGGGCACCCGGAGGAAAGTCTGTTACTACT
ACGACGGGGATGTTGGAAATTACTATTATGGACAAGGCCACCCAATGAAGCCTCACCGAA
TCCGCATGACTCATAATTTGCTGCTCAACTATGGTCTCTACCGAAAAATGGAAATCTATC
GCCCTCACAAAGCCAATGCTGAGGAGATGACCAAGTACCACAGCGATGACTACATTAAAT
TCTTGCGCTCCATCCGTCCAGATAACATGTCGGAGTACAGCAAGCAGATGCAGAGATTCA
ACGTTGGTGAGGACTGTCCAGTATTCGATGGCCTGTTTGAGTTCTGTCAGTTGTCTACTG
GTGGTTCTGTGGCAAGTGCTGTGAAACTTAATAAGCAGCAGACGGACATCGCTGTGAATT
GGGCTGGGGGCCTGCACCATGCAAAGAAGTCCGAGGCATCTGGCTTCTGTTACGTCAATG
ATATCGTCTTGGCCATCCTGGAACTGCTAAAGTATCACCAGAGGGTGCTGTACATTGACA
TTGATATTCACCATGGTGACGGCGTGGAAGAGGCCTTCTACACCACGGACCGGGTCATGA
CTGTGTCCTTTCATAAGTATGGAGAGTACTTCCCAGGAACTGGGGACCTACGGGGATATC
GGGCTGGGCAAGCAAGTATTATGCTGTTAACTACCCGCTCCGAGACCGGATTGATGACGA
GTCCTATGAGGCCATTTCCAAGCCGTCATGTCCAAGGAATGGNAGAGTTCCACCCTAGTG
CGGTGGGTCTACAGGGTGGCTCAGACTCCTATCTGGGGATCGGGTANGTTGCTTCATCTA
ACTTCAAAGACCCGCCCG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004964 unedited
CAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTATAGAAAGGGACCATTTTAT
TACAAAGAGGCTCACAAAAATGAAAATAGTATCTCAAAAAGGAAACTAGACTAGCAACCT
CCACCTGCAGAATTAGGAGAAGACAGACAGAGGGCAGGCAGTGTTTCTTGGCTCACTTGA
GGCCAGTGGGAAGGTACTAATACAGAACCAATCTAAAAATGGCTGATGTTACTTTAGGAG
CCTGAAAAAAACAGGAGATCCTTGAAGACCCAGCCACCCCTTCTAGAATGTTCAATAAGG
GCACCTTTCCAAAGCTACTAAGCAGGCACTTGGCATTTCAGGAGTTTGTCTTATGGTTGC
ATAAAAGTATCCCTTTCACCCAGACCTGGCACCCTTTATGGTTCAAAGTTAAGAACGGGA
AGAATGGGTGGCAAGGTGGCTCCTGGAAGAGCTCACCCAGCACAGCTGCCCTGAGCTCGG
GGCCTTGGTTTCTGTCCCTGGGGATATTTATATTTAATAAATTTTTATATAAATTCCCCG
AGAACTAGAAAATATAAAATCTGAGGGGTTGGGGAAGAAACGTGAGGGACTCACCAGGAA
GCCAGAGCTGGAGAAGTCCATTCAGGCCAACTTGACCTCCTCCTTGACCCCTTTGGCTTC
TGGACTTCCCCTCCCTGGGTTTTTTCCTTCGGGAGACCTCCTTTTTCTCCTCTGGGCCTT
TTCTTTTTTTATCCCCGGTTTGGACTCTTTTGGGCTTTTTTGAAGTTGGAACAATTTTTG
CGGGCCCCCTTTTCTCCTTTTTATAATCGGAAAATCTTCTCTACAGGCATCCCTTTTCAA
AAACACCCACCAAGTCTTGCCAGGTGCCCTTCCCCCCCACCCCTTCCTTAGGTACGGCGC
CCATGATTTCCGCTTTGTCCCCCCCGTCGCGGATTTTTATGGCCCCAAACCGCCGCTTCC
CCCCTGTCCATCCCCGCCGTTTCACTTATATACCCGCCCCCCCCCACTTCCATTCCCCCC
C

Restriction Sites: NotI-NotI

ACCN: NM_004964

Insert Size: 2200 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
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_004964.2, NP_004955.2
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]