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Product datasheet for SC317003

HDAC2 (NM_001527) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HDAC2 (NM_001527) Human Untagged Clone
Tag:	Tag Free
Symbol:	HDAC2
Synonyms:	HD2; KDAC2; RPD3; YAF1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF sequence for NM_001527 edited
CAGCAGCAGCAGCAGCAGCAGGAGGAGGAGCCCGGTGGCGGCGGTGGCCGGGGAGCC
CATGGCGTACAGTCAAGGAGGCGGCAAAAAAAAAGTCTGCTACTACTACGACGGTGATAT
TGGAAATTATTATTATGGACAGGGTCATCCCATGAAGCCTCATAGAATCCGCATGACCCA
TAACTTGCTGTTAAATTATGGCTTATACAGAAAAATGGAAATATATAGGCCCCATAAAGC
CACTGCCGAAGAAATGACAAAATATCACAGTGATGAGTATATCAAATTTCTACGGTCAAT
AAGACCAGATAACATGTCTGAGTATAGTAAGCAGATGCAGAGATTTAATGTTGGAGAAGA
TTGTCCAGTGTTTGATGGACTCTTTGAGTTTTGTCAGCTCTCAACTGGCGGTTCAGTTGC
TGGAGCTGTGAAGTTAAACCGACAACAGACTGATATGGCTGTTAATTGGGCTGGAGGATT
ACATCATGCTAAGAAATCAGAAGCATCAGGATTCTGTTACGTTAATGATATTGTGCTTGC
CATCCTTGAATTACTAAAGTATCATCAGAGAGTCTTATATATTGATATAGATATTCATCA
TGGTGATGGTGTTGAAGAAGCTTTTTATACAACAGATCGTGTAATGACGGTATCATTCCA
TAAATATGGGGAATACTTTCCTGGCACAGGAGACTTGAGGGATATTGGTGCTGGAAAAGG
CAAATACTATGCTGTCAATTTTCCAATGAGAGATGGTATAGATGATGAGTCATATGGGCA
GATATTTAAGCCTATTATCTCAAAGGTGATGGAGATGTATCAACCTAGTGCTGTGGTATT
ACAGTGTGGTGCAGACTCATTATCTGGTGATAGACTGGGTTGTTTCAATCTAACAGTCAA
AGGTCATGCTAAATGTGTAGAAGTTGTAAAAACTTTTAACTTACCATTACTGATGCTTGG
AGGAGGTGGCTACACAATCCGTAATGTTGCTCGATGTTGGACATATGAGACTGCAGTTGC
CCTTGATTGTGAGATTCCCAATGAGTTGCCATATAATGATTACTTTGAGTATTTTGGACC
AGACTTCAAACTGCATATTAGTCCTTCAAACATGACAAACCAGAACACTCCAGAATATAT
GGAAAAGATAAAACAGCGTTTGTTTGAAAATTTGCGCATGTTACCTCATGCACCTGGTGT
CCAGATGCAAGCTATTCCAGAAGATGCTGTTCATGAAGACAGTGGAGATGAAGATGGAGA
AGATCCAGACAAGAGAATTTCTATTCGAGCATCAGACAAGCGGATAGCTTGTGATGAAGA
ATTCTCAGATTCTGAGGATGAAGGAGAAGGAGGTCGAAGAAATGTGGCTGATCATAAGAA
AGGAGCAAAGAAAGCTAGAATTGAAGAAGATAAGAAAGAAACAGAGGACAAAAAAACAGA
CGTTAAGGAAGAAGATAAATCCAAGGACAACAGTGGTGAAAAAACAGATACCAAAGGAAC
CAAATCAGAACAGCTCAGCAACCCCTGAATTTGACAGTCTCACCAATTTCAGAAAATCAT
TAAAAAGAAAATATTGAAAGGAAAATGTTTTCTTTTTGAAGACTTCTGGCTTCATTTTAT
ACTACTTTGGCATGGACTGTATTTATTTTCAAATGGCTTTTTCGTTTTTGTTTTTCTTGG
CAAGTTTTATTGTGAGTTTTTCTAATTATGAAGCAAAATTTCTTTTCTCCACCATGCTTT
ATGTGATAGTATTTAAAATTGATGTGAGTTATTATGTCAAAAAAACTGATCTATTAAAGA
AGTAATTGGCCTTTCTGAGCTGATTTTTCCATCTTTTGTAATTATCTTTATTAAAAAATT
GTACTTGGAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001527 unedited
TACCTTGTATACGACTCCTATAGGGCGGCCGCGAATTCGGCACGAGGATGCGCTCACCTC
CCTGCGGCCTCCTGAGGTGGTTTGGTGGCCCCCTCCTCGCGAGTTGGTGCCGCTGCCACC
TCCGATTCCGAGCTTTCGGCACCTCTGCCGGGTGGTACCGAGCCTTCCCGGCGCCCCCTC
CTCTCCTCCCACCGGCCTGCCCTTCCCCGCGGGACTATCGCCCCCACGTTTCCCTCAGCC
CTTTTCTCTCCCGGCCGAGCCGCGGCGGCAGCAGCAGCAGCAGCAGCAGCAGGAGGA
GGAGCCCGGTGGCGGCGGTGGCCGGGGAGCCCATGGCGTACAGTCAAGGAGGCGGCAAAA
AAAAAGTCTGCTACTACTACGACGGTGATATTGGAAATTATTATTATGGACAGGGTCATC
CCATGAAGCCTCATAGAATCCGCATGACCCATAACTTGCTGTTAAATTATGGCTTATACA
GAAAAATGGAAATATATAGGCCCCATAAAGCCACTGCCGAAGAAATGACAAAATATCACA
GTGATGAGTATATCAAATTTCTACGGTCAATAAGACCAGATAACATGTCTGAGTATAGTA
AGCAGATGCAGAGATTTAATGTTGGAGAAGATTGTCCAGTGTTTGATGGACTCTTTGAGT
TTTGTCAGCTCTCAACTGGCGGTTCAGTTGCTGGAGCTGTGAAGTTAAACCCGACAACAG
ACTGATATGGCTTGTTAATTTGGCTGGAGATTACATCATGCTAAGAAATCAGAGCATCAG
ATTCTGTTACGTAATGATATTTGTGCTGCATCTGATACTAAGTATCATCAGAAGAGTCTA
TATATTGAATATAGATATCATCATGTGATTGTGTTGAGAGCTTTTTATACAAACAGATCG
GTGTATGACGTATTCATTCCT

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_001527 unedited
CGAGATGCACTTCAGGGCCGGAAGCACCGGGTGAGGGGTCACAGGGATGCCACCCGGGAT
CTGTTCAGGAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTT
TTTTCCAAGTACAATTTTTTAATAAAGATAATTACAAAAGATGGAAAAATCAGCTCAAAA
AGGCCAATTACTTCTTTAATAGATCAGTTTTTTTGACATAATAACTCACATCAATTTTAA
ATACTATCACATAAAGCATGGTGGAAAAAAAAAATTTTGCTTCATAATTAGAAAAACTCA
CAATAAAACTTGCCAAGAAAAACAAAAACGAAAAAGCCATTTGAAAATAAATACAGTCCA
TGCCAAAGTAGTATAAAATGAAGCCAGAAGTCTTCAAAAAGAAAACATTTTCCTTTCAAT
ATTTTCTTTTTAATGATTTTCTGAAATTGGTGAGACTGTCAAATTCAGGGGTTGCTGAGC
TGTTCTGATTTGGTTCCTTTGGTATCTGTTTTTTCACCACTGTTGTCCTTGGATTTATCT
TCTTCCTTAACGTCTGTTTTTTTTGTCCTCTGTTTCTTTCTTATCTTCTTCAATTCTAGCT
TTCTTTGCTCCTTTCTTATGATCAGCCACATTTCTTCGACCTCCTTCTCCTTCATCCTCA
GAATCTGAGAATTCTTCATCACAAGCTATCCGCTTGTCTGATGCTCGAATAGAAATTCTC
TTGTCTGGATCTTCTCCATCTTCATCTCCACTGTCTTCATGACAGCATCTTCTGGAATAG
CTTGCATCTGGACACAGTGCATGAGTACATGCGCAATTTTCAAACAACGCTGTTTATCTT
TCATATATTCTGGAGTGTCTGTTGTCATGTGAGACTATATGCAGTGAGTCGTCCAATACT
CAGTATCATATGCACTCATGGCATCTCCATCAGGCACTGCG
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Restriction Sites: Please inquire

ACCN: NM_001527

Insert Size: 1900 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 may be unstable or toxic at high copy number in common E. coli strain. We recommend using a lower copy number E. coli strain, such as CopyCutter strain (http://www.epibio.com/item.asp?ID=435) for transformation and plasmid preparation. Please be aware that the DNA yield could be low. Additional aliquots of this clone can be ordered from OriGene.

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_001527.2, NP_001518.2
RefSeq Size:	6659 bp
RefSeq ORF:	1749 bp
Locus ID:	3066
UniProt ID:	Q92769
Cytogenetics:	6q21
Domains:	Hist_deacetyl
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Protein Pathways:	Cell cycle, Chronic myeloid leukemia, Huntington's disease, Notch signaling pathway, Pathways in cancer
Gene Summary:	This gene product belongs to the histone deacetylase family. Histone deacetylases act via the formation of large multiprotein complexes, and are responsible for the deacetylation of lysine residues at the N-terminal regions of core histones (H2A, H2B, H3 and H4). This protein forms transcriptional repressor complexes by associating with many different proteins, including YY1, a mammalian zinc-finger transcription factor. Thus, it plays an important role in transcriptional regulation, cell cycle progression and developmental events. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2010] Transcript Variant: This variant (1) encodes the functional protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.