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Product datasheet for MG226709

Hdac2 (NM_008229) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hdac2 (NM_008229) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Hdac2
Synonyms:	D10Wsu179e; mRPD3; YAF1; Yy1bp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG226709 representing NM_008229
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTACAGTCAAGGAGGCGGCAAGAAGAAAGTGTGCTACTACTATGATGGTGATATTGGCAATTATT
ATTATGGCCAGGGTCATCCCATGAAGCCTCATAGAATCCGGATGACTCATAACTTGCTGCTAAATTATGG
TTTATACCGAAAAATGGAAATATATAGGCCTCATAAAGCCACTGCTGAAGAAATGACTAAATACCACAGC
GATGAGTATATCAAGTTTCTACGATCAATAAGACCAGATAATATGTCTGAGTACAGTAAGCAGATGCAGA
GATTTAACGTCGGAGAAGATTGTCCGGTGTTTGATGGACTCTTTGAGTTTTGTCAGCTCTCCACGGGTGG
TTCAGTTGCTGGGGCTGTGAAATTAAACCGGCAACAAACTGATATGGCTGTCAATTGGGCTGGAGGACTA
CATCATGCCAAGAAGTCAGAAGCATCAGGGTTCTGCTATGTTAATGATATTGTGCTTGCCATCCTCGAAT
TACTTAAGTATCATCAGAGAGTCTTATATATTGACATAGACATCCACCATGGTGATGGTGTTGAGGAAGC
TTTTTATACAACAGATCGCGTGATGACCGTCTCATTCCATAAATATGGGGAATACTTTCCTGGAACAGGA
GACTTGAGGGATATTGGTGCTGGAAAGGGAAAATACTATGCTGTCAATTTTCCCATGAGAGATGGTATAG
ATGATGAATCATATGGACAAATTTTTAAGCCTATCATCTCAAAAGTGATGGAGATGTACCAGCCTAGCGC
GGTGGTGCTGCAGTGTGGCGCAGACTCCCTGTCTGGGGACAGGCTTGGTTGTTTCAATCTAACTGTCAAA
GGTCATGCTAAATGTGTAGAAGTAGTGAAAACTTTTAACTTGCCATTGCTGATGCTCGGTGGAGGAGGCT
ACACAATCCGGAATGTTGCCCGATGTTGGACATATGAGACTGCAGTTGCCCTTGATTGTGAAATTCCCAA
TGAGTTGCCATATAATGATTACTTTGAGTATTTTGGACCAGACTTCAAACTGCATATTAGTCCTTCAAAC
ATGACAAACCAGAACACTCCAGAATATATGGAAAAGATAAAACAGCGTTTATTTGAAAATCTACGTATGT
TACCACATGCACCTGGTGTTCAAATGCAAGCTATTCCAGAGGATGCTGTTCATGAAGACAGTGGAGATGA
GGATGGAGAAGACCCGGACAAAAGAATTTCCATTCGAGCATCAGACAAACGGATAGCTTGCGATGAAGAG
TTTTCAGATTCTGAGGATGAAGGTGAAGGAGGTCGTAGGAATGTTGCTGATCATAAGAAAGGAGCAAAGA
AGGCTAGGATTGAAGAAGACAAGAAGGAGACAGAGGACAAGAAGACAGATGTTAAGGAAGAAGACAAATC
CAAGGACAATAGTGGTGAGAAAACAGACCCCAAAGGAGCCAAGTCAGAACAACTCAGCAACCCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

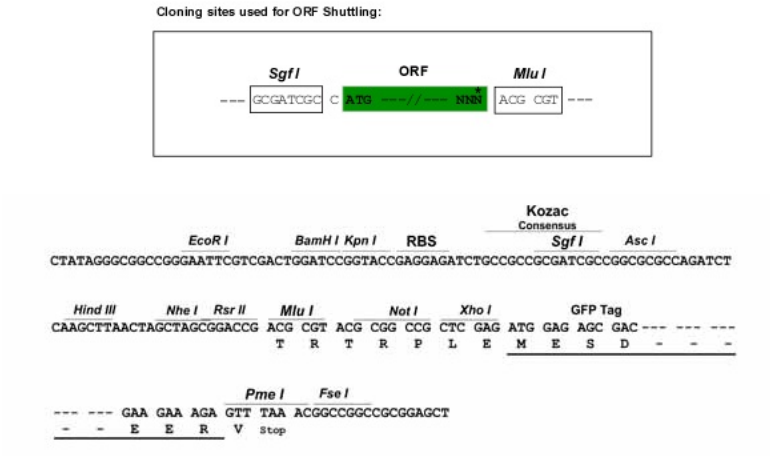
>MG226709 representing NM_008229
Red=Cloning site Green=Tags(s)

MAYSQGGGKKKVCYYYDGDIGNYYYGQGHPMKPHRIRMTHNLLLNYGLYRKMEIYRPHKATAEEMTKYHS
DEYIKFLRSIRPDNMSEYSKQMQRFNVGEDCPVFDGLFEFCQLSTGGSVAGAVKLNRQQTDMAVNWAGGL
HHAKKSEASGFCYVNDIVLAILELLKYHQRVLYIDIDIHHGDGVEEAFYTTDRVMTVSFHKYGEYFPGTG
DLRDIGAGKGKYYAVNFPMRDGIDDESYGQIFKPIISKVMEMYQPSAVVLQCGADSLSGDRLGCFNLTVK
GHAKCVEVVKTFNLPLLMLGGGGYTIRNVARCWTYETAVALDCEIPNELPYNDYFEYFGPDFKLHISPSN
MTNQNTPEYMEKIKQRLFENLRMLPHAPGVQMQAIPEDAVHEDSGDEDGEDPDKRISIRASDKRIACDEE
FSDSEDEGEGGRRNVADHKKGAKKARIEEDKKETEDKKTDVKEEDKSKDNSGEKTDPKGAKSEQLSNP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_008229

ORF Size: 1464 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

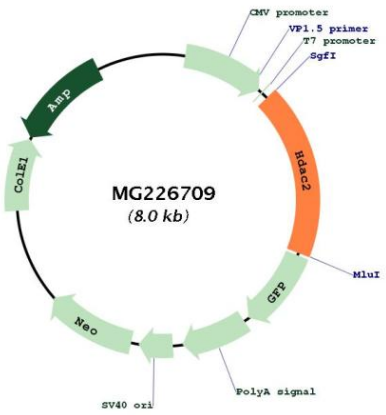
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_008229.2, NP_032255.2
RefSeq Size:	2004 bp
RefSeq ORF:	1467 bp
Locus ID:	15182
UniProt ID:	P70288
Cytogenetics:	10 B1
Gene Summary:	Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes (By similarity). Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. May be involved in the transcriptional repression of circadian target genes, such as PER1, mediated by CRY1 through histone deacetylation. Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226709