

## Product datasheet for **RG224972**

### HDAC9 (NM\_058176) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HDAC9 (NM\_058176) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** HDAC9  
**Synonyms:** HD7; HD7b; HD9; HDAC; HDAC7; HDAC7B; HDAC9B; HDAC9FL; HDRP; MITR  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG224972 representing NM\_058176  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCACAGTATGATCAGCTCAGTGGATGTGAAGTCAGAAGTTCCTGTGGCCTGGAGCCCATCTCACCTT  
TAGACCTAAGGACAGACCTCAGGATGATGATGCCCGTGGTGGACCCTGTTGTCCGTGAGAAGCAATTGCA  
GCAGGAATTACTTCTTATCCAGCAGCAGCAACAAATCCAGAAGCAGCTTCTGATAGCAGAGTTTCAGAAA  
CAGCATGAGAAGTTCACACGGCAGCACCAGGCTCAGTTCAGGAGCATATCAAGGAAGTTCAGCCATAA  
AACAGCAACAAGAACTCCTAGAAAAGGAGCAGAACTGGAGCAGCAGAGGCAAGAACAGGAAGTAGAGAG  
GCATCGCAGAGAACAGCAGCTTCTCCTCTCAGAGGCAAGATAGAGGACGAGAAAAGGGCAGTGGCAAGT  
ACAGAAGTAAAGCAGAAGCTTCAAGAGTTCCTACTGAGTAAATCAGCAACGAAAGACACTCCAACCTAATG  
GAAAAATCATTCCGTGAGCCGCCATCCCAAGCTCTGGTACACGGCTGCCACCACACATCATTGGATCA  
AAGCTCTCCACCCCTTAGTGGAACATCTCCATCTACAAGTACACATTACCAGGAGCACAAGATGCAAAAG  
GATGATTTCCCCCTTCGAAAACTGCCTCTGAGCCCAACTGAAGGTGCCGTCCAGGTTAAAACAGAAAAG  
TGGCAGAGAGGAGAAGCAGCCCTTACTCAGGCGGAAGGATGGAATGTTGTCACTTCATTCAAGAAGCG  
AATGTTTGAGGTGACAGAATCCTCAGTCAGTAGCAGTTCTCCAGGCTCTGGTCCCAGTTCACCAACAAT  
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CAGAAGTGTGAGACGCAGACGCTTAGGCAAGGTGTTCTCTGCCTGGCAGTATGGAGGCAGCATCCCGG  
CATCTTCCAGCCACCCTCATGTTACTTTAGAGGAAAAGCCACCCAACAGCAGCCACCAGGCTCTCCTGCA  
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ACACCAGCAATTCTTGGAGAAGCAGAAGCAATACCAGCAGCAGATCCACATGAACAAACTGCTTTCGAAA



TCTATTGAACAACTGAAGCAACCAGGCAGTCACCTTGAGGAAGCAGAGGAAGAGCTTCAGGGGGACCAGG  
 CGATGCAGGAAGACAGAGCGCCCTCTAGTGGCAACAGCACTAGGAGCGACAGCAGTGTCTGTGTGGATGA  
 CACTGGGACAAGTTGGGGCTGTGAAGGTCAAGGAGGAACCACTGGACAGTGTGAAGATGCTCAGATC  
 CAGGAAATGGAATCTGGGGAGCAGGCTGCTTTTATGCAACAGCCTTTCTGGAACCCACGCACACACGTG  
 CGCTCTCTGTGCAGCAAGCTCCGCTGGCTGCGGTTGGCATGGATGGATTAGAGAAACACCGTCTCGTCTC  
 CAGGACTACTCTCCCCTGCTGCCTCTGTTTTACCTCACCCAGCAATGGACCGCCCCCTCCAGCCTGGC  
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 ACCCTGAGCATGCTGGACGAATACAGAGTATCTGGTCACGACTGCAAGAACTGGGCTGCTAAATAAATG  
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 TTGGAGAAGGTACAATAAAATATTGCCTGGACAGGTGGCCTTGATCCTCCCATGGGAGATGTTGAGTA  
 CCTGAAGCATTGAGCCATCGTGAAGCCTGTGGCCAAAGAGTTTATCCAGACATGGTCTTAGTATCT  
 GCTGGATTTGATGATTGGAAGGCCACACCCCTCCTCTAGGAGGGTACAAAGTACGCGCAAAATGTTTTG  
 GTCATTTGACGAAGCAATTGATGACATTGGCTGATGGAGTGTGGTGTGGCTCTAGAAGGAGGACATGA  
 TCTCACAGCCATCTGTGATGCATCAGAAGCCTGTGTAATGCCCTTCTAGGAAATGAGCTGGAGCCACTT  
 GCAGAAGATATTCTCCACCAAGCCCGAATATGAATGCTGTTATTTCTTTACAGAAGATCATTGAAATTC  
 AAAGTATGCTTTAAAGTTCTCT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG224972 representing NM\_058176  
 Red=Cloning site Green=Tags(s)

MHSMISSVDVKSEVPVGLLEPI SPLDLRDLRMMMPVVDPPVREKQLQQLLLIQQQQIQKQLLIAEFQK  
 QHENLTRQHQAQLQEHIKELLAIKQQELLEKEQKLEQQRQEQEVERHRREQQLPPLRGKDRGRERAVAS  
 TEVKQKLQEFLLSKSATKDTPTNGKNHSVSRHPKLWYTAHHTSLDQSSPPLSGTSPSYKYTLPGAQDAK  
 DDFPLRKTASEP NLKVRSLKQKVAERRSSPLLRRKDGNNVTSFKKRMFEVTESSVSSSSPGSGPSSPNN  
 GPTGSVTENETSVLPPTPHAEQMVQQRILIHEDSMNLLSLYTSPLPNITLGLPAVPSQLNASNSLKEK  
 QKCETQTLRQGVPLPGQYGGIPASSSHPHVTLEGKPPNSSHQALLQHLLLKEQMRQKLLVAGGVPLHP  
 QSPLATKERISPGIRGTHKLPRHRPLNRTQSAPLPQSTLAQLVIQQHQQFLEKQKQYQQQIHMNKLLSK  
 SIEQLKQPGSHLEEAEEELQGDQAMQEDRAPSSGNSTRSDSSACVDDTLGQVAVKVKKEPVDSDEDAQI  
 QEMESGEQAAMQPFLEPTHTRALSVRQAPLAAVGMDGLEKHRLVSRTHSSPAASVLPHPAMDRPLQPG  
 SATGAIYDPLMLKHQCVCGNSTTHPEHAGRIQSIWSRLQETGLLNKCERIQGRKASLEEIQLVHSEHSL  
 LYGTNPLDGKLDPRILLGDDSQKFFSSLPCCGLGVSDTIWNELHSSGAARMAVGCVIELASKVASGEL  
 KNGFAVVRPPGHAEESTAMGFCFFNSVAITAKYLRDQLNISKILIVDLVHHGNGTQQAFYADPSILYI  
 SLHRYDEGNFFPGSGAPNEVGTGLGEGYNINIAWTGGLDPPMGDVEYLEAFRTIVKPAKEFPDPMVLVS  
 AGFDALEGHTPPLGGYKVTAKCFGHLTKQLMTLADGRVVLALEGGHDLTAICDASEACVNALLGNELEPL  
 AEDILHQSPNMNAVISLQKIEIQSMSLKFS

TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_058176

**ORF Size:** 3033 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](mailto: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\\_058176.2](#), [NP\\_478056.1](#)

**RefSeq Size:** 3149 bp

**RefSeq ORF:** 3036 bp

**Locus ID:** 9734

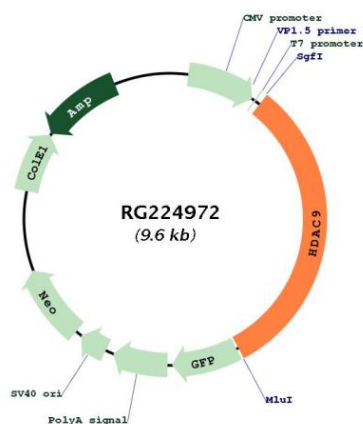
**UniProt ID:** [Q9UKV0](#)

**Cytogenetics:** 7p21.1

**Protein Families:** Druggable Genome, Transcription Factors

**Gene Summary:** Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene has sequence homology to members of the histone deacetylase family. This gene is orthologous to the Xenopus and mouse MITR genes. The MITR protein lacks the histone deacetylase catalytic domain. It represses MEF2 activity through recruitment of multicomponent corepressor complexes that include CtBP and HDACs. This encoded protein may play a role in hematopoiesis. Multiple alternatively spliced transcripts have been described for this gene but the full-length nature of some of them has not been determined. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG224972