

## **Product datasheet for SC328222**

## 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436

OriGene Technologies, Inc.

Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# HDAC8 (NM\_001166420) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** HDAC8 (NM\_001166420) Human Untagged Clone

Tag: Tag Free Symbol: HDAC8

Synonyms: CDA07; CDLS5; HD8; HDACL1; KDAC8; MRXS6; RPD3; WTS

Mammalian Cell

Selection:

None

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001166420, the custom clone sequence may differ by one or

more nucleotides

ATGGAGGAGCCGGAGAACCGGCGGACAGTGGGCAGTCGCTGGTCCCGGTTTATATCTAT
AGTCCCGAGTATGTCAGTATGTGACTCCCTGGCCAAGATCCCCAAACGGGCCAGTATG
GTGCATTCTTTGATTGAAGCATATGCACTGCATAAGCAGATGAGGATAGTTAAGCCTAAA
GTGGCCTCCATGGAGGAGATGGCCACCTTCCACACTGATGCTTATCTGCAGCATCTCCAG
AAGGTCAGCCAAGAGGGCGATGATGATCATCCGGACTCCATAGAATATGGGCTAGGTTAT
GACTGCCCAGCCACTGAAGGGATATTTGACTATGCAGCAGCTATAGGAGGGGCTACGATC
ACAGCTGCCCAATGCCTGATTGACGGAATGTGCAAAGTAGCAATTAACTGGTCTGGAGGG

TGGCATCATGCAAAGAAGTAA

**Restriction Sites:** Please inquire **ACCN:** NM\_001166420

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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: <u>NM 001166420.1</u>, <u>NP 001159892.1</u>

RefSeq Size: 1125 bp
RefSeq ORF: 441 bp
Locus ID: 55869
UniProt ID: Q9BY41
Cytogenetics: Xq13.1

**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 belongs to class I of the histone deacetylase family. It catalyzes the deacetylation of lysine residues in the histone N-terminal tails and represses transcription in large multiprotein complexes with transcriptional co-repressors. Multiple transcript variants encoding different isoforms have

been found for this gene. [provided by RefSeq, Oct 2009]

Transcript Variant: This variant (4) lacks a large portion of the 3' coding region and has a distinct 3' UTR, compared to variant 1. The encoded isoform (5) has a shorter C-terminus, compared to isoform 1. Sequence Note: A downstream translational start codon is selected for this RefSeq based on a strong Kozak signal and transcript support. An upstream in-frame start codon is also present but has a weaker Kozak signal and sparse transcript support. Use of the upstream start codon would result in a protein that is 38 aa longer at the N-terminus. Leaky scanning by ribosomes may allow translation initiation at the downstream start codon, which is supported by 5'RACE experiments described in PubMed: 10922473 and encodes a protein with an N-terminus similar to other family members.