

Product datasheet for **MG212571**

H2ac1 (NM_175658) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: H2ac1 (NM_175658) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: H2ac1
Synonyms: Hist1; Hist1h2aa; Th2a
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG212571 representing NM_175658
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGGTCTACAAAGCGGGTGGCAAGGCTCGTGCCAAGGTCAAGTCTCGCTCTCCAGGGCAGGT
 TGCAGTTTCTGTGGTCTGTGCACCGCTTCTCCGCAAGGGAACACGCACAACGAATTGGGGCTGG
 TGCACAGTGTATCTGGCGCAGTGCTAGAATACTTGACAGCTGAGGTCTGGAGCTGGCGGCAACGCA
 GCCCGGACAACAAGAAGACGCGCATTACTCTCGCCACCTGCAGCTGGCCATCCGCAACGACGAGGAGC
 TCAACAAGTTGCTTGCCGCGTGACCATCGCGCAGGGTGGCGTCTGCCAACATCCAGGCCGTGCTGCT
 GCCAAGAAGACCGAGAGCCACAAGTCCCAGACCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG212571 representing NM_175658
 Red=Cloning site Green=Tags(s)

MSGPTKRGGKARAKVKSRSSRAGLQFPVGRVHLLRQGNYAQRIGAGAPVYLAAVLEYLTAEVLELAGNA
 ARDNKTRITPRHLQLAIRNDEELNKLGRVTIAQGGVLPNIQAVLLPKKTESHKSQTK

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



[View online »](#)

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_175658.3](#)

RefSeq Size: 390 bp

RefSeq ORF: 390 bp

Locus ID: 319163

Cytogenetics: 13 A3.1

Gene Summary: Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H2A family. Transcripts from this gene contain a palindromic termination element. [provided by RefSeq, Aug 2015]