

## Product datasheet for **MG215938**

### H2ac10 (NM\_175661) Mouse Tagged ORF Clone

#### Product data:

<b>Product Type:</b>	Expression Plasmids
<b>Tag:</b>	TurboGFP
<b>Symbol:</b>	H2ac10
<b>Synonyms:</b>	H2a-22; H2a-221; Hist1h; Hist1h2af
<b>Mammalian Cell Selection:</b>	Neomycin
<b>Vector:</b>	pCMV6-AC-GFP (PS100010)
<b>E. coli Selection:</b>	Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG215938 representing NM\_175661  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCTGGACGCGCAAACAGGGTGGCAAGGCTCGCGCAAGGCCAAGACCCGCTCCTCCCGGGCCGGCC  
TGCAGTTCCTCCGTGGGCCGCGTGCACCCGGCTGCTCCGCAAGGGCAACTACTCGGAGCGCGTGGCCGCGG  
CGCCCCGGTGTACCTGGCGCCGCTGCTGGAGTACCTGACGGCCGAGATCCTGGAGCTGGCGGGCAACGCG  
GCCCGCGACAACAAGAAGACGCGCATCATCCCGGCCACCTGCAGCTGGCCATCCGCAACGACGAGGAGC  
TCAACAAGCTGTTGGGCCGCGTGACCATCGCGCAGGGCGGCGTCTGCCAACATCCAGGCCGTGCTGCT  
GCCAAGAAGACCGAGAGCCACCATAAGCCCAAGGAAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

**Protein Sequence:** >MG215938 representing NM\_175661  
Red=Cloning site Green=Tags(s)

MSGRGKQGGKARAKAKTRSSRAGLQFPVGRVHRLLRKGNYSERVGAGAPVYLAHVLEYLTAIEILELAGNA  
ARDNKKTRIIPRHLQLAIRNDEELNKLGRVTIAQGGVLPNIQAVLLPKKTESHHKPKGK

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_175661

**ORF Size:** 390 bp

**OTI Disclaimer:** 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq:	<a href="#">NM_175661.3</a>
RefSeq Size:	393 bp
RefSeq ORF:	393 bp
Locus ID:	319173
UniProt ID:	<a href="#">Q8CGP5</a>

Cytogenetics: 13 A3.1

**Gene Summary:** Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an 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 lack polyA tails; instead, they contain a palindromic termination element. [provided by RefSeq, Aug 2015]

### Product images:



Circular map for MG215938