

## Product datasheet for **MG200934**

### H2ax (NM\_010436) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** H2ax (NM\_010436) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** H2ax  
**Synonyms:** AW228881; gammaH; gammaH2ax; H2A.; H2A.X; H2af; H2afx; Hist5-; Hist5-2ax  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG200934 representing NM\_010436  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCGGACGCGGCAAGACCGCGGCAAGGCCCGCGCCAAGGCCAAGTCGCGCTCTTCACGCGCCGGCC  
TTCAGTTCCTGTAGGCCGCGTACACCGGCTGCTGCGGAAAGGCCACTACGCCGAGCGCGTGGGCGCAGG  
CGCGCCGGTGTACCTGGCAGCGGTGCTCGAGTACCTACTGCCGAGATCTGGAGCTGGCGGGCAACGCG  
GCCCGCGACAACAAGAAGACGCGCATCATCCCGCGCCACCTGCAGCTGGCCATCCGCAACGACGAGGAGC  
TCAACAAGCTGCTGGGCGCGTGACCATCGCGCAGGGCGGCGTCTGCCAACATCCAGGCCGTGCTGCT  
GCCAAGAAGAGCAGCGCCACCGTGGGGCCAAGGCGCCGGCGGTGGCAAGAAGGCCTCGCAGGCCTCT  
CAGGAGTAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG200934 representing NM\_010436  
Red=Cloning site Green=Tags(s)

MSGRGKTGGKARAKAKSRSSRAGLQFPVGRVHRLLRKGYAERVGAGAPVYLAAVLEYLTAEILELAGNA  
ARDNKKTRIIPRHLQLAIRNDEELNKLGGVTIAQGGVLPNIQAVLLPKSSATVGPKAPAVGKKASQAS  
QEY

**TRTRPLE** - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1941\\_e10.zip](https://cdn.origene.com/chromatograms/ja1941_e10.zip)

**Restriction Sites:** Sgfl-Mlul



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**Cloning Scheme:**


**ACCN:** NM\_010436

**ORF Size:** 429 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\\_010436.2](#), [NP\\_034566.1](#)

RefSeq Size: 1414 bp

RefSeq ORF: 432 bp

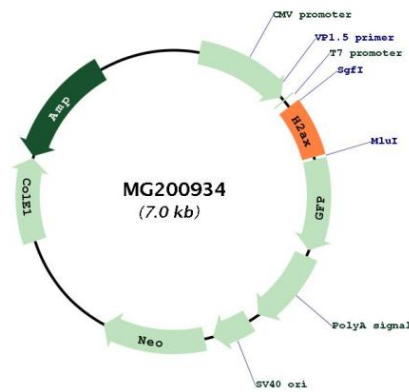
Locus ID: 15270

UniProt ID: [P27661](#)

Cytogenetics: 9 24.84 cM

**Gene Summary:** Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene encodes a replication-independent histone that is a member of the histone H2A family. [provided by RefSeq, Nov 2015]

**Product images:**



Circular map for MG200934