

Product datasheet for **RG201434**

Histone H2A.X (H2AFX) (NM_002105) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Histone H2A.X (H2AFX) (NM_002105) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Histone H2A.X
Synonyms: H2A.X; H2A/X; H2AFX
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG201434 representing NM_002105
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCGGGCGCGGCAAGACTGGCGCAAGGCCCGCGCCAAGGCCAAGTCGCGCTCGTCGCGCGCCGGCC
 TCCAGTCCCAGTGGGCGGTGTACACCGGCTGCTGCGGAAGGGCCACTACGCCGAGCGGTTGGCGCCGG
 CGCGCCAGTGTACCTGGCGGCAGTGTGGAGTACCTCACCGCTGAGATCCTGGAGCTGGCGGCAATGCC
 GCCCGGACAACAAGAAGACGCGAATCATCCCCGCCACCTGCAGCTGGCCATCCGCAACGACGAGGAGC
 TCAACAAGCTGCTGGGCGCGTGACGATCGCCAGGGAGGCGTCTGCCAACATCCAGGCCGTGCTGCT
 GCCAAGAAGACCAGCGCCACCGTGGGGCGAAGGCGCCCTCGGGCGGCAAGAAGGCCACCCAGGCCTCC
 CAGGAGTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG201434 representing NM_002105
 Red=Cloning site Green=Tags(s)

MSGRGKTGGKARAKAKSRSSRAGLQFPVGRVHRLLRKGYAERVGAGAPVYLAAVLEYLTAEILELAGNA
 ARDNKKTRIIPRHLQLAIRNDEELNKLGGVTIAQGGVLPNIQAVLLPKKTSATVGPKAPSGGKKATQAS
 QEY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_002105

ORF Size: 429 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.

RefSeq: [NM_002105.3](#)

RefSeq Size: 1585 bp

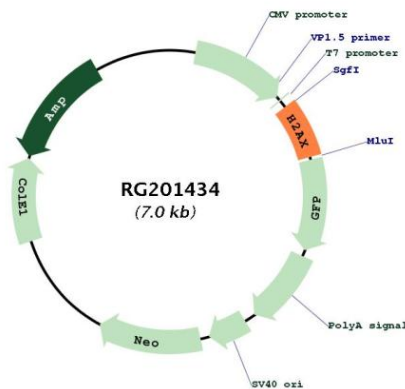
RefSeq ORF: 432 bp

Locus ID: 3014

UniProt ID: [P16104](#)

Cytogenetics:	11q23.3
Domains:	H2A, histone
Protein Families:	Druggable Genome
Protein Pathways:	Systemic lupus erythematosus
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, and generates two transcripts through the use of the conserved stem-loop termination motif, and the polyA addition motif. [provided by RefSeq, Oct 2015]

Product images:



Circular map for RG201434