

Product datasheet for RG203814

OriGene Technologies, Inc.

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HIST1H2AK (HIST1H2AG) (NM_021064) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: HIST1H2AK (HIST1H2AG) (NM_021064) Human Tagged ORF Clone

Tag: TurboGFP
Symbol: HIST1H2AK

Synonyms: H2A.1b; H2A/p; H2AC13; H2AC15; H2AC16; H2AC17; H2AFP; H2AG; HIST1H2AG; pH2A/f

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

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

ORF Nucleotide >RG203814 representing NM_021064

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCTGGACGTGGCAAGCAGGGAGGCAAAGCCCGCGCTAAGGCCAAGACTCGCTCTTCTAGGGCCGGTC TCCAGTTCCCCGTGGGCCGAGTGCACCGCCTGCTCCGCAAAGGCAACTATGCCGAGCGGGTCGGGGCCGG CGCGCCGGTGTATCTGGCAGCGGTGCTGGAGTACCTGACCGCCGAGATCCTGGAACTGGCGGCAACGACGAGGAGC GCCCGCGACAACAAGAAGACCCGCATCATCCCGCGTCATCTCCAACTGGCCATCCGCAACGACGAGGAGC TCAACAAGCTGCTGGCAAAGTCACCATCGCACAGGGCGGTGTCCTGCCCAACATTCAGGCCGTGCTACT

GCCCAAAAAGACTGAGAGCCACCACAAGGCGAAGGGCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG203814 representing NM_021064

Red=Cloning site Green=Tags(s)

MSGRGKQGGKARAKAKTRSSRAGLQFPVGRVHRLLRKGNYAERVGAGAPVYLAAVLEYLTAEILELAGNA

ARDNKKTRIIPRHLQLAIRNDEELNKLLGKVTIAQGGVLPNIQAVLLPKKTESHHKAKGK

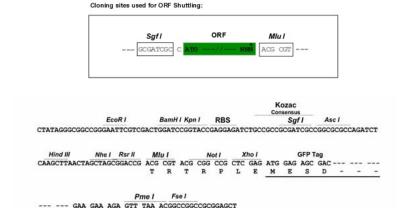
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul





Cloning Scheme:



ACCN: NM_021064

ORF Size: 390 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 customercom 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: <u>NM 021064.5</u>

 RefSeq Size:
 2267 bp

 RefSeq ORF:
 393 bp

 Locus ID:
 8969

 UniProt ID:
 P0C0S8

 Cytogenetics:
 6p22.1

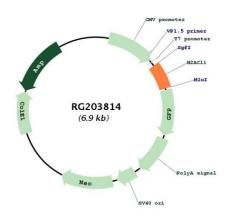
Protein Pathways: Systemic lupus erythematosus

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 is intronless and encodes a replication-dependent histone that is a member of the histone H2A family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the histone microcluster on

chromosome 6p21.33. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RG203814