

## Product datasheet for **RG200688**

### H2AC19 (NM\_001040874) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** H2AC19 (NM\_001040874) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** H2AC19  
**Synonyms:** H2A/R; H2AC18; HIST2H2AA4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG200688 representing NM\_001040874  
**Red**=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGGTCTGGCAAGCAAGGAGGCAAGGCCCGCCCAAGCCAAGTCGCGCTCGTCCCAGCTGGCC  
TTCAGTCCCAGTAGGGCGAGTGCATCGCTTGTGCGCAAAGGCAACTACGCGGAGCGAGTGGGGCCGG  
CGCGCCGCTACATGGCTGCGGTCCTCGAGTATCTGACCGCCGAGATCCTGGAGCTGGCGGCAACGCG  
GCTCGGGACAACAAGAAGACGCGCATCATCCCTCGTCACCTCCAGCTGGCCATCCGCAACGACGAGGAAC  
TGAACAAGCTGCTGGCAAAGTACCATCGCCAGGGCGGCGTCTGCCTAACATCCAGGCCGACTGCT  
CCCTAAGAAGACGAGAGTCACCACAAGGCAAAGGCAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG200688 representing NM\_001040874  
**Red**=Cloning site **Green**=Tags(s)

MSGRGKQGGKARAKAKSRSSRAGLQFPVGRVHRLLRKGNYAERVGAGAPVYMAAVLEYLTAEILELAGNA  
ARDNKKTRIIPRHLQLAIRNDEELNKLKGVITIAQGGVLPNIQAVLLPKKTESHKAKGK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**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\\_001040874.1](#), [NP\\_001035807.1](#)

**RefSeq Size:** 534 bp

**RefSeq ORF:** 393 bp

**Locus ID:** 723790

**UniProt ID:** [Q6FI13](#)

**Cytogenetics:** 1q21.2

**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 a histone cluster on chromosome 1. This gene is one of four histone genes in the cluster that are duplicated; this record represents the telomeric copy. [provided by RefSeq, Aug 2015]