

## Product datasheet for **RG217009**

### **H2AC7 (NM\_021065) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** H2AC7 (NM\_021065) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** H2AC7  
**Synonyms:** H2A.3; H2A/g; H2AFG; HIST1H2AD  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG217009 representing NM\_021065  
**Red**=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCGGACGCGCAAGCAAGGCGAAAGGCCCGAGCTAAGGCTAAGACCCGCTCTTCGCGGGCCGGAC  
TCCAGTTCCTGTGGCCGCGTACACCGCTTGCTCCGCAAGGGCAACTACTCCGAGCGAGTCGGGGCCGG  
CGCGCCAGTGTATCTGGCGCGGTGTTGGAGTACCTGACCGCGAGATCCTGGAGCTGGCGGCAACGCC  
GCCCGCGACAACAAGAAGACCCGCATCATCCCCGACACCTGCAGCTGGCCATCCGCAACGACGAGGAGC  
TAAACAAGTTGCTGGGTAAGTCAAAATGCTCAGGGCGGTGTTCTGCCAACATCCAGGCTGTACTGCT  
CCCAAGAAGACTGAGAGTCACCACAAGGCCAAGGGCAAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG217009 representing NM\_021065  
**Red**=Cloning site **Green**=Tags(s)

MSGRGKQGGKARAKAKTRSSRAGLQFPVGRVHRLLRKGNYSERVGAGAPVYLAAVLEYLTAEILELAGNA  
ARDNKKTRIIPRHLQLAIRNDEELNKLKGVTIAQGGVLPNIQAVLLPKKTESHKAKGK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI

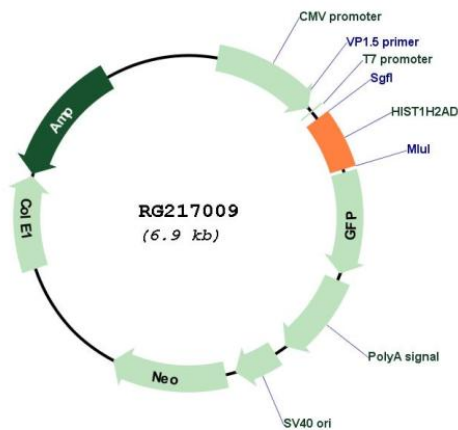


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_021065

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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_021065.3</a>
<b>RefSeq Size:</b>	460 bp
<b>RefSeq ORF:</b>	393 bp
<b>Locus ID:</b>	3013
<b>UniProt ID:</b>	<a href="#">P20671</a>
<b>Cytogenetics:</b>	6p22.2
<b>Protein Pathways:</b>	Systemic lupus erythematosus
<b>Gene Summary:</b>	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. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Aug 2015]