

Product datasheet for **RG209635**

H2BC21 (NM_003528) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: H2BC21 (NM_003528) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: H2BC21
Synonyms: GL105; H2B; H2B.1; H2BE; H2BFQ; H2BGL105; H2BQ; HIST2H2BE
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG209635 representing NM_003528
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGCCTGAACCGGCAAAATCCGCTCCGGCCCTAAAAAGGGCTCCAAGAAAGCCGTCACCAAAGCCAGA
 AGAAAGACGGCAAGAAGCGCAAGCGCAGCCGCAAGAGAGCTACTCCATCTACGTGTACAAGGTGCTGAA
 GCAGGTCCACCCGACACCGGCATCTCGTCCAAGGCCATGGGCATCATGAACTCCTTCGTCAACGACATC
 TTCGAGCGCATCGCGGGAGAGGCTTCCGCTGCGCACTACAACAAGCGCTCCACCATCACATCCCGCG
 AGATCCAGACGGCGTGCGCTGCTGCTGCCGCGGAGCTGGCCAAGCACGCCGTGTCGAGGGCACCAA
 GCGGTCACCAAGTACACGACTCCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG209635 representing NM_003528
Red=Cloning site Green=Tags(s)

MPEPAKSAPAPKKGSKKAVTKAQKKDGKKRKRSRKESYSIYVYKVLKQVHPDTGISSKAMGIMNSFVNDI
 FERIAGEASRLAHYNKRSTITSREIQTAVRLLLPGLAKHAVSEGTKAVTKYTSSK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:



ACCN: NM_003528

ORF Size: 378 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 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_003528.3](#)

RefSeq Size: 2223 bp

RefSeq ORF: 381 bp

Locus ID: 8349

UniProt ID: [Q16778](#)

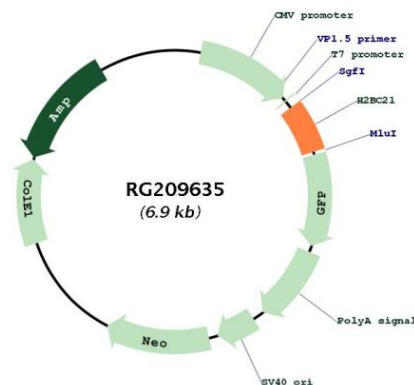
Cytogenetics: 1q21.2

Domains: H2B, histone

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-dependent histone that is a member of the histone H2B family, and generates two transcripts through the use of the conserved stem-loop termination motif, and the polyA addition motif. The protein has antibacterial and antifungal antimicrobial activity. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RG209635