

Product datasheet for **RG203699**

Macro H2A.2 (H2AFY2) (NM_018649) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Macro H2A.2 (H2AFY2) (NM_018649) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Macro H2A.2
Synonyms:	H2AFY2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203699 representing NM_018649 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGTCGGGCGGAGTGGGAAGAAGAAAATGTCCAAGCTGTCCGTTCCAGCTAGGGCAGGTGTCATCTTTCAGTGGGGAGGCTGATGCGTTATCTGAAGAAAGGGACGTTCAAGTACCGGATCAGCGTGGCGCCCTGTCTACATGGCGGCAGTCATTGAGTACCTGGCAGCGGAAATTTCTAGAATTGGCCGCAATGCCGCGAGGGACAACAAGAAGGCCCGGATAGCCCCGAGACACATCTTGTCTGGCAGTTGCCAATGACGAGGAGCTCAACCAGCTGCTAAAAGGAGTGACCATCGCCAGTGGAGGCGTCTGCCAGAATTCACCCGAAGTCTGGCCAAAAAGCGAGGGACAAAAGGCAAGTCGGAACGATCCTCTCCCCACCCAGAGAAAAGAGGCAGGAAGGCCACGTCAAGCAAGAAGGGGGGAAGAAATCCAAGGCTGCCAAACCACGACGTCAAAAAGTCCAAACCAAGGACACGATAAAGAAGGAACCTCAAATTCACCTCTGAAGATGGGCCAGGGGATGGATTACCATTCTGTCTTAAGAGCCTTGTCTGGGACAGAAGCTGTCTTAACCCAGAGTGACATCAGCCATATTGGCTCCATGAGAGTGGAGGGCATTGTCCACCAACCACAGCCGAAATGACCTCAAAGAAGATATAGGTAAGCCCTTGGAAAAGGCTGGGGAAAAGAGTTCCTTGAAACCGTAAAGGAGCTTCGCAATCCCAAGGCCCTTTGGAAGTCGCCGAAGCCCGCTCAGCCAATCCAGTGGACTCGCAGCCAAATTTGTCATCCACTGTACATCCCTCAGTGGGGCTCCGACAAATGTGAAGAACAGCTTGAAGAGACCATCAAAAAGTGCCTGACGCGGAGGACAGAAAGCTAAAGTCCGTCGCTTCCCGCCTTTCCAGCGGAGAAACTGCTTTCCAAACAGACTGCGGCCAGGTGACCCTCAAAGCCATCTCAGCCACTTTGATGACTCGAGCGCGTCTCGCTGAAGAACGTGTACTTCTGCTCTTCGACAGCGAGAGCATCGGCATCTACGTGCAGGAGATGGCCAAGCTCGACGCCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG203699 representing NM_018649
 Red=Cloning site Green=Tags(s)

MSGRSQKKKMSKLSRSARAGVIFPVGRLMRYLKKGTFFKYRISVGAPVYMAAVIEYLAAEILELAGNAARD
 NKKARIAPRHILLAVANDEELNQLLKGVTIASGGVLPRIHPELLAKKRGTGKSETILSPPEKGRKAT
 SGKKGGKSKAAKPRTSKSKPKDSDKEGTSNSTSEDGPGDGFITLSSKSLVLGQKLSLTQSDISHIGSM
 RVEGIVHPTTAEIDLKEDIGKALEKAGGKEFLETVKELRKSQGPLLEVAEAAVSQSSGLAAKFVIHCHIPQ
 WGSQDKCEEQLEETIKNCLSAEDKLLKSVAFPPFSGRNCFPKQTAQVTLKAISAHFDDSSASSLKNVY
 FLLFDSESIGIYVQEMAKLDAK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018649

ORF Size: 1116 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_018649.3](#)

RefSeq Size: 2181 bp

RefSeq ORF: 1119 bp

Locus ID: 55506

UniProt ID: [Q9P0M6](#)

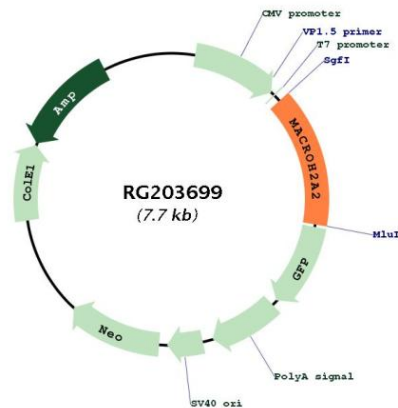
Cytogenetics: 10q22.1

Domains: H2A, A1pp, 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. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone 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 encodes a replication-independent histone that is a member of the histone H2A family. It replaces conventional H2A histones in a subset of nucleosomes where it represses transcription and may participate in stable X chromosome inactivation. [provided by RefSeq, Oct 2015]

Product images:



Circular map for RG203699