

Product datasheet for MR205746

Macroh2a2 (NM_207000) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Macroh2a2 (NM_207000) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Macroh2a2
Synonyms:	H2afy; H2afy2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205746 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCAGGCCGGAGCGGGAAGAAGAAAAATGTCCAAGCTGTCCCGTCAGCCAGGGCCGGCGTCATCTTTC
CAGTAGGCCGGTTGATGCGCTACTTGAAAAAGGGAACCTCAAGTACAGGATCAGCGTAGGTGCTCCCGT
CTACATGGCTGCGGTCATTGAGTACCTAGCAGCGGAAATCCTGGAGTTGGCTGGGAACGCTGCGAGGGAC
ACAAGAAGGCACGGATAGCCCCAGACACATCCTGCTGGCCGTTGCCAACGACGAGGAAGTCAACCAGC
TACTGAAAGGAGTACTATCGCCAGTGGGGGTGTCTGCCGAGAATCCACCCGAAGTCTGGCCAAAGAA
GCGAGGGACCAAAGGCAAGTCAAGAGCAGTCTCTCCCAACCCAGAGAAAAGGAAGGAAGGCCGCA
TCAGGCAAGAAGGGGGTAAGAAATCCAAGGCCACCAAGCCACGACGTCCTCAAGAAGTCTAAAGCAAAGG
ACAGCGATAAAGAAGGAACATCAAATCCACCTCGGAGGATGGGCCGGGAGATGGCTTACCATCTTGTC
TTCAAGAGCCTCGTTCTGGGGCAGAAGCTATCCCTGACCCAGAGTGACATCAGCCATATTGGCTCCATG
AGGGTGGAGGGCATCGTCCACCAACCACAGCCGAGATCGACCTCAAGGAAGAGATAGGGAAAGCCTTGG
AAAAGGCTGGGGTAAAGAGTTCTTGAAACAGTGAAGGAGCTTCGCAAGTCCCAAGGCCCTTTGGAAGT
CGCTGAAGCTGCCGTAGCCAATCCAGTGGACTCGCAGCCAAATTTGTCATCCACTGTCACATCCCCAG
TGGGCTCCGACAAATGTGAAGAACAGCTGGAAGAGACCATCAAAAAGTGCCTGTCTGCAGCAGAGGCA
AGAAGCTTAAATCCGTGCGCTTCCACCGTTCCCAAGTGGCAGAAACTGCTTCCCAACAGACGGCCGC
CCAGGTGACCCTCAAGGCCATCTCGGCTCACTCGACGACTCGAGCTCGTCTCGTGAAGAATGTGTAC
TTCTGCTCTTCGACAGCGAGAGCATCGGCATCTACGTGCAGGAGATGGCCAAACTGGACACCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR205746 protein sequence
 Red=Cloning site Green=Tags(s)

MSGRSGKKKMSKLSRSARAGVIFPVGRLMRYLKKGTFFKYRISVGAPVYMAAVIEYLAAEILELAGNAARD
 NKKARIAPRHILLAVANDEELNQLLKGVTIASGGVLPRIHPELLAKKRGTGKSETILSPPPEKRGRKAA
 SGKKGKKSKATKPRTSKSKAKDSDKEGTSNSTSEDGPGDGFTILSSKSLVLGQKLSLTQSDISHIGSM
 RVEGIVHPTTAEIDLKEEIGKALEKAGGKEFLETVKELRKSQGPLLEVAEAAVSQSSGLAAKFVIHCHIPQ
 WGS DKCEEQLEETIKNCLSAEDKLLKSVAFPPFSGRNCFPKQTAQVTLKAISAHFDDSSSSSLKNVY
 FLLFDSESIGIYVQEMAKLDTK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_207000

ORF Size: 1119 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_207000.2](#), [NP_996883.1](#)

RefSeq Size: 1910 bp

RefSeq ORF: 1119 bp

Locus ID: 404634

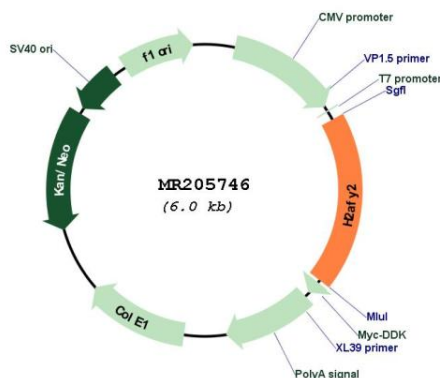
UniProt ID: [Q8CCK0](#)

Cytogenetics: 10 B4

MW: 40.1 kDa

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, Nov 2015]

Product images:



Circular map for MR205746