

## **Product datasheet for MC218287**

## Macroh2a1 (NM 001159515) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Macroh2a1 (NM\_001159515) Mouse Untagged Clone

Tag: Tag Free
Symbol: Macroh2a1

Synonyms: H2af; H2AF12; H2AF12M; H2afy; MACROH2; mH2a; mH2a1

**Mammalian Cell** 

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC218287 representing NM\_001159515

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCGAGCCGCGGGGAAGAAGAAATCCACCAAGACCTCCCGGTCAGCCAAGGCCGGAGTCATCTTCC CTGTGGGACGCATGCTTCGGTACATCAAGAAAGGCCACCCTAAGTATAGGATCGGAGTGGGGGCACCTGT AACAAGAAGGGACGGGTCACACCCCGGCACATCCTGTTAGCTGTGGCCAATGATGAAGAGCTAAACCAGC GCGAGGATCCAAGGGAAAATTGGAAGCCATCATCACGCCTCCGCCGGCCAAAAAAGGCCAAGTCTCCATCC CAGAAGAAGCCAGTGGCTAAGAAGACAGGAGGCAAGAAAGGGGCCCGGAAGTCTAAGAAGCAGGGAGAAG TGAGCAAGGCGGCCAGCGCAGACAGTACGACGGAGGGCACGCCTACAGACGGCTTCACTGTCCTCTCCAC GTCGTTCACCCGACAAACACTGACTTCTACACCGGTGGTGAAGTAGGAAACACACTGGAGAAGAAGGGCG GCAAGGAGTTTGTAGAAGCTGTTCTGGAACTCCGGAAAAAGAACGGGCCCTTGGAGGTAGCTGGAGCTGC TATTAGTGCAGGCCATGGCCTGCCAAGTTTGTGATCCACTGTAATAGTCCTGTCTGGGGTGCAGAC AAATGTGAAGAACTTCTAGAAAAGACGGTGAAAAACTGCTTGGCTCTAGCTGATGACAGAAAGCTGAAAT CCATCGCCTTCCCATCCATTGGCAGCGGCAGGAACGGGTTCCCGAAGCAGACAGCCGGCCCAGCTCATTCT GAAGGCCATCTCCAGCTACTTTGTCTCCACGATGTCCTCCTCCATCAAAACTGTGTACTTCATGCTTTTT GACAGTGAGAGCATAGGTATCTATGTGCAGGAAATGGCCAAGCTGGACGCCAACTAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul



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**Insert Size:** 1107 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001159515.1</u>, <u>NP 001152987.1</u>

 RefSeq Size:
 1966 bp

 RefSeq ORF:
 1107 bp

 Locus ID:
 26914

 UniProt ID:
 Q9QZQ8

 Cytogenetics:
 13 B1

**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 participates in stable X chromosome inactivation. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by

RefSeq, Nov 2015]

Transcript Variant: This variant (4) uses an alternate in-frame splice site and an alternate exon in the central coding region, compared to variant 1. The resulting isoform (4) lacks an internal

residue and differs in an internal segment, compared to isoform 1.