

Product datasheet for MC226253

Hmgb3 (NM 001293623) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Hmgb3 (NM_001293623) Mouse Untagged Clone

Tag: Tag Free Symbol: Hmgb3

Synonyms: Hmg2a; Hmg4 **Mammalian Cell**

Selection:

Neomycin

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

Fully Sequenced ORF: >MC226253 representing NM_001293623

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTAAAGGTGACCCCAAGAAACCAAAGGGCAAGATGTCTGCTTATGCCTTCTTTGTGCAGACATGCA GGGAAGAACATAAGAAGAAAAACCCAGAGGTTCCCGTCAATTTTGCTGAGTTCTCCAAGAAGTGCTCGGA GAGGTGGAAGACCATGTCTAGCAAAGAGAAATCAAAGTTTGATGAAAATGGCAAAGGCAGATAAAGTCCGA TATGATCGGGAGATGAAAGATTATGGACCAGCTAAAGGAGGCAAGAAGAAGAAGAACCCCAAATGCCCCCA AAAGACCTCCGTCTGGATTTTTCTTATTCTGCTCTGAATTCCGCCCCAAGATCAAATCCACAAACCCTGG CATCTCCATTGGAGATGTGGCAAAAAAGCTGGGTGAGATGTGGAATAACTTAAGTGACAATGAAAAGCAG CCTTATGTCACCAAGGCAGCAAAGCTGAAGGAGAAGTATGAGAAGGATGTTGCTGACTATAAGTCTAAAG

GGAAGAGAAGAAGAGGAGGAGGAAGATGAA<mark>TAA</mark>

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001293623

Insert Size: 603 bp



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ORIGENE

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).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

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 001293623.1</u>, <u>NP 001280552.1</u>

 RefSeq Size:
 1798 bp

 RefSeq ORF:
 603 bp

 Locus ID:
 15354

 UniProt ID:
 054879

Cytogenetics: X A7.3

Gene Summary: Multifunctional protein with various roles in different cellular compartments. May act in a

redox sensitive manner. Associates with chromatin and binds DNA with a preference to non-canonical DNA structures such as single-stranded DNA. Can bent DNA and enhance DNA flexibility by looping thus providing a mechanism to promote activities on various gene promoters (By similarity). Proposed to be involved in the innate immune response to nucleic

acids by acting as a cytoplasmic promiscuous immunogenic DNA/RNA sensor (PubMed:19890330). Negatively regulates B-cell and myeloid cell differentiation. In

hematopoietic stem cells may regulate the balance between self-renewal and differentiation.

Involved in negative regulation of canonical Wnt signaling (PubMed:12714519, PubMed:15358624, PubMed:16945912).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript. Variants 1, 2, 3, and 4

encode the same protein.