

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
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC226253 representing NM_001293623
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGCTAAAGGTGACCCCAAGAAACCAAGGGCAAGATGTCTGCTTATGCCTTCTTTGTGCAGACATGCA
GGGAAGAACATAAGAAGAAAAACCCAGAGGTTCCCGTCAATTTTGTCTGAGTTCTCCAAGAAGTGCTCGGA
GAGGTGGAAGACCATGTCTAGCAAAGAGAAATCAAAGTTTGATGAAATGGCAAAGGCAGATAAAGTCCGA
TATGATCGGGAGATGAAAGATTATGGACCAGCTAAAGGAGGCAAGAAGAAGGACCCAAATGCCCCCA
AAAGACCTCCGTCTGGATTTTTCTTATTCTGCTCTGAATTCGCCCAAGATCAAATCCACAAACCTGG
CATCTCCATTGGAGATGTGGCAAAAAGCTGGGTGAGATGTGGAATAACTTAAGTGACAATGAAAAGCAG
CCTTATGTACCAAGGCAGCAAAGCTGAAGGAGAAGTATGAGAAGGATGTTGCTGACTATAAGTCTAAAG
GGAAGTTTGATGGTGCCAAGGTCCTGCTAAAGTTGCCCGAAAAAGGTGGAAGAAGAGGAAGAGGAGGA
GGAAGAGGAAGAAGAGGAGGAGGAAGAGGAGGAAGATGAAT**AA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001293623
Insert Size: 603 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).



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:	<ol style="list-style-type: none">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:	<u>NM_001293623.1</u> , <u>NP_001280552.1</u>
RefSeq Size:	1798 bp
RefSeq ORF:	603 bp
Locus ID:	15354
UniProt ID:	<u>O54879</u>
Cytogenetics:	X A7.3
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript. Variants 1, 2, 3, and 4 encode the same protein.</p>