

## Product datasheet for RC225239

### HMGB2 (NM\_001130688) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HMGB2 (NM\_001130688) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** HMGB2  
**Synonyms:** HMG2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC225239 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGGATCGCC

ATGGGTAAAGGAGACCCCAACAAGCCGCGGGGCAAATGTCCTCGTACGCCTTCTCGTGCAGACCTGCC  
GGGAAGAGCACAAGAAGAAACACCCGGACTCTCCGTCATTTTCGCGGAATTCCTCAAGAAGTGTTCGGA  
GAGATGGAAGACCATGTCTGCAAAGGAGAAGTCAAGTTGAAGATATGGCAAAAAGTGACAAAGCTCGC  
TATGACAGGGAGATGAAAAATTACGTTCTCCAAAGGTGATAAGAAGGGGAAGAAAAGGACCCCAATG  
CTCCTAAAAGGCCACCATCTGCCTTCTCTGTTTTGCTCTGAACATCGCCAAAGATCAAAGTGAACA  
CCCTGGCCTATCCATTGGGGATACTGCAAAGAAATTGGGTGAAATGTGGTCTGAGCAGTCAGCCAAAGAT  
AAACAACCATATGAACAGAAAGCAGCTAAGCTAAAGGAGAAATATGAAAAGGATATTGCTGCATATCGTG  
CCAAGGGCAAAAGTGAAGCAGGAAAGAAGGGCCCTGGCAGGCCAACAGGCTCAAAGAAGAAGAACGAACC  
AGAAGATGAGGAGGAGGAGGAGGAAGAAGAAGATGAAGATGAGGAGGAAGAGGATGAAGATGAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC225239 protein sequence  
 Red=Cloning site Green=Tags(s)

MGKGDPNKPRGKMSSYAFFVQTCREEHKKKHPDSSVNF AEF SKKCSERWK TMSAKEKSKFEDMAKSDKAR  
YDREMKNYVPPKGDKKGKKKDPNAPKRPPSAFFLFCSEHRPKIKSEHPGLSIGDTAKKLGEMWSEQSAKD  
KQPYEQKAAKLKEKYEKDIAAYRAKKGSEAGKKGPRPTGSKKKNPEDEEEEEEEEEDEEEEEDEE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV



**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6233\\_e03.zip](https://cdn.origene.com/chromatograms/mk6233_e03.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_001130688

**ORF Size:** 627 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_001130688.1](#), [NP\\_001124160.1](#)

**RefSeq Size:** 1467 bp

**RefSeq ORF:** 630 bp

**Locus ID:** 3148

**UniProt ID:** [P26583](#)

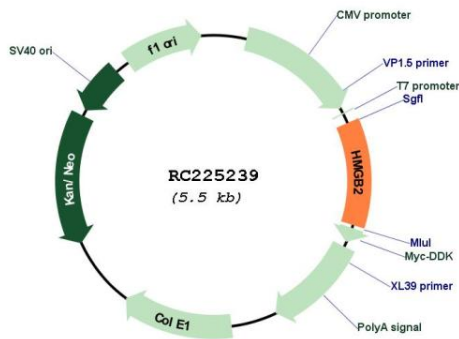
**Cytogenetics:** 4q34.1

**Protein Families:** Druggable Genome, Transcription Factors

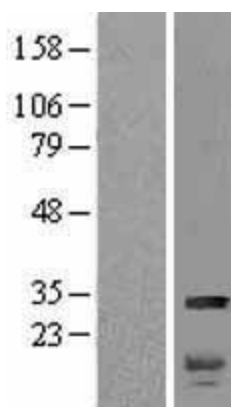
**MW:** 24 kDa

**Gene Summary:** This gene encodes a member of the non-histone chromosomal high mobility group protein family. The proteins of this family are chromatin-associated and ubiquitously distributed in the nucleus of higher eukaryotic cells. In vitro studies have demonstrated that this protein is able to efficiently bend DNA and form DNA circles. These studies suggest a role in facilitating cooperative interactions between cis-acting proteins by promoting DNA flexibility. This protein was also reported to be involved in the final ligation step in DNA end-joining processes of DNA double-strand breaks repair and V(D)J recombination. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC225239



Western blot validation of overexpression lysate (Cat# [LY427243]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225240] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).