

Product datasheet for RC225240

HMGB2 (NM_001130689) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HMGB2 (NM_001130689) 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: >RC225240 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGTAAAGGAGACCCCAACAAGCCGCGGGGCAAATGTCCTCGTACGCCTTCTCGTGCAGACCTGCC
 GGGAAAGAGCACAAGAAGAAACACCCGGACTCTCCGTCATTTTCGCGGAATTCCTCAAGAAGTGTTCGGA
 GAGATGGAAGACCATGTCTGCAAAGGAGAAGTGAAGTTGAAGATATGGCAAAAAGTGACAAAGCTCGC
 TATGACAGGGAGATGAAAAATTACGTTCTCCAAAGGTGATAAGAAGGGGAAGAAAAGGACCCCAATG
 CTCCTAAAAGGCCACCATCTGCCTTCTCTGTTTTGCTCTGAACATCGCCAAAGATCAAAGTGAACA
 CCCTGGCCTATCCATTGGGGATACTGCAAAGAAATTGGGTGAAATGTGGTCTGAGCAGTCAGCCAAAGAT
 AAACAACCATATGAACAGAAAGCAGCTAAGCTAAAGGAGAAATATGAAAAGGATATTGCTGCATATCGTG
 CCAAGGGCAAAAGTGAAGCAGGAAAGAAGGGCCCTGGCAGGCCAACAGGCTCAAAGAAGAAGAACGAAC
 AGAAGATGAGGAGGAGGAGGAGGAAGAAGAAGATGAAGATGAGGAGGAAGAGGATGAAGATGAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC225240 protein sequence
 Red=Cloning site Green=Tags(s)

MGKGDPNKPRGKMSSYAFFVQTCREEHKKKHPDSSVNF AEF SKKCSERWK TMSAKEKSKFEDMAKSDKAR
 YDREMKNYVPPKGDKKGKKKDPNAPKRPPSAFFLFCSEHRPKIKSEHPGLSIGDTAKKLGEMWSEQSAKD
 KQPYEQKAAKLKEKYEKDIAAYRAKKGSEAGKKGPRPTGSKKNEPEDEEEEEEEEEDEDEEED

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6233_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001130689

ORF Size: 627 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_001130689.1](#), [NP_001124161.1](#)

RefSeq Size: 1454 bp

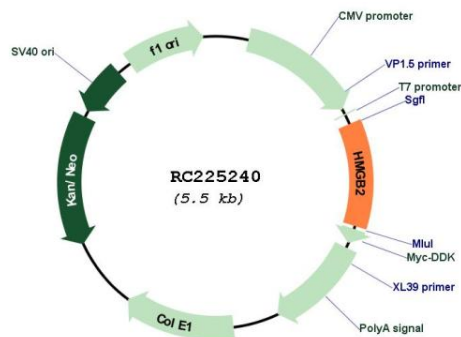
RefSeq ORF: 630 bp

Locus ID: 3148

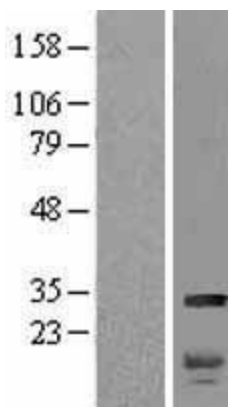
UniProt ID: [P26583](#)
Cytogenetics: 4q34.1
Protein Families: Druggable Genome, Transcription Factors
MW: 24 kDa

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 RC225240



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]).