

Product datasheet for RC200750

HMGB2 (NM_002129) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: HMGB2 (NM_002129) 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: >RC200750 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGTAAAGGAGACCCCAACAAGCCGGGGCAAATGTCTCGTACGCCTTCTTCGTGCAGACCTGCC
 GGGAAAGAGCACAAGAAGAAACCCCGACTCTCCGTCATTTTCGCGGAATTCCTCAAGAAGTGTTCGGA
 GAGATGGAAGACCATGTCTGCAAAGGAGAAGTCAAGTTGAAGATATGGCAAAAAGTGACAAAGCTCGC
 TATGACAGGGAGATGAAAAATTACGTTCTCCAAAGGTGATAAGAAGGGGAAGAAAAGGACCCCAATG
 CTCCTAAAAGGCCACCATCTGCCTTCTCTGTTTTGCTCTGAACATCGCCAAAGATCAAAGTGAACA
 CCCTGGCCTATCCATTGGGGATACTGCAAAGAAATTGGGTGAAATGTGGTCTGAGCAGTCAGCCAAAGAT
 AAACAACCATATGAACAGAAAGCAGCTAAGCTAAAGGAGAAATATGAAAAGGATATTGCTGCATATCGTG
 CCAAGGGCAAAAGTGAAGCAGGAAAGAAGGGCCCTGGCAGGCCAACAGGCTCAAAGAAGAAGAACGAACC
 AGAAGATGAGGAGGAGGAGGAGGAAGAAGAAGATGAAGATGAGGAGGAAGAGGATGAAGATGAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200750 protein sequence
 Red=Cloning site Green=Tags(s)

MGKGDPNKPRGKMSSYAFFVQTCREEHKKKHPDSSVNF AEF SKKCSERWKTMSAKEKSKFEDMAKSDKAR
 YDREMKNYVPPKGDKKGKKKDPNAPKRPPSAFFLFCSEHRPKIKSEHPGLSIGDTAKKLGEMWSEQSAKD
 KQPYEQAAKLKEKYEKDIAAYRAKKGSEAGKKGPRPTGSKKNEPEDEEEEEEEEEDEDEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002129

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

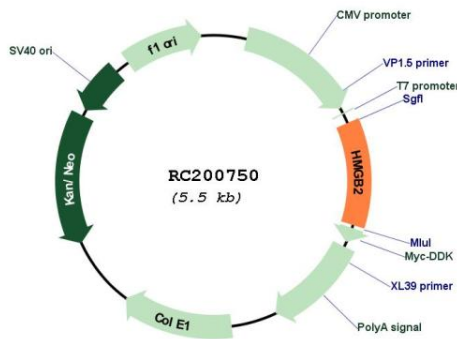
RefSeq: [NM_002129.4](#)

RefSeq Size: 1527 bp

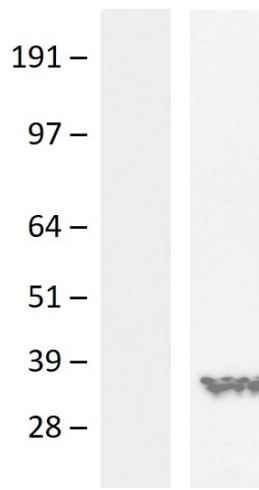
RefSeq ORF: 630 bp
Locus ID: 3148
UniProt ID: [P26583](#)
Cytogenetics: 4q34.1
Domains: HMG
Protein Families: Druggable Genome, Transcription Factors
MW: 24 kDa

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]

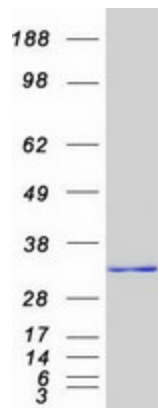
Product images:



Circular map for RC200750



Western blot validation of overexpression lysate (Cat# [LY419515]) using anti-DDK antibody (Cat# [TA592569]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200750 using transfection reagent PEI.



Coomassie blue staining of purified HMGB2 protein (Cat# [TP300750]). The protein was produced from HEK293T cells transfected with HMGB2 cDNA clone (Cat# RC200750) using MegaTran 2.0 (Cat# [TT210002]).