

Product datasheet for MR202276

Hmgb2 (BC002050) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hmgb2 (BC002050) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Hmgb2
Synonyms: C80539; HMG-2; Hmg2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR202276 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGCAAGGGTGACCCCAACAAGCCGCGGGGCAAAATGTCTCGTACGCCTTCTCGTGCAGACCTGCC
 GCGAGGAGCACAAGAAGAAGCATCCCGACTCGTCGGTGAACCTCGCCGAGTTCTCCAAGAAATGCTCCGA
 GAGATGGAAGACCATGTCTGCAAAGGAAAAGTCCAAGTTGAAGATTTGGCCAAGAGCGACAAGCTCGT
 TATGACAGGGAGATGAAGAACTATGTTCTCCAAAGGGGATAAGAAAGGAAAGAAAAAGACCCCAATG
 CTCGAAGAGACCACCGTCTGCCTTCTCCTGTTTTGCTCTGAAAATCGCCCAAAGATCAAATTTGAACA
 CCCAGGCCTGTCTATTGGAGATACTGCGAAGAACTGGGTGAGATGTGGTCTGAGCAATCTGCCAAGAT
 AAACAACCGTATGAGCAGAAAGCAGCTAAACTAAAGGAGAAGTATGAAAAGGATATTGCTGCATACCGTG
 CCAAGGGCAAAAGTGAAGCAGGAAAGAAGGGTCTGGTAGGCCAACAGGCTCAAAGAAGAAGAACGAACC
 AGAAGATGAGGAGGAGGAAGAAGAGGAGGAAGAGGAGGAAGATGAAGAGGAAGAAGAGGAGGATGAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR202276 protein sequence
 Red=Cloning site Green=Tags(s)

MGKGDPNKPRGKMSSYAFFVQTCREEHKKKHPDSSVNF AEF SKKCSERWK TMSAKEKSKFEDLAKSDKAR
 YDREMKNYVPPKGDKKGKKKDPNAPKRPPSAFFLFCSENRPKIKIEHPGLSIGDTAKKLGEMWSEQSAKD
 KQPYEQAAKLKEKYEKDIAAYRAKKGSEAGKKGPRPTGSKKNEPEEEEEEEEEEEEEEEEEDEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

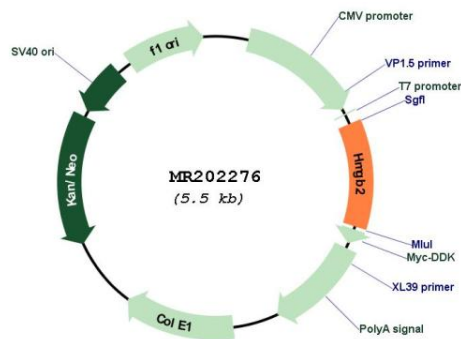


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MW: 24.2 kDa

Gene Summary: Multifunctional protein with various roles in different cellular compartments. May act in a redox sensitive manner. In the nucleus is an abundant chromatin-associated non-histone protein involved in transcription, chromatin remodeling and V(D)J recombination and probably other processes. 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 enhancing transcription factor binding and/or bringing distant regulatory sequences into close proximity (By similarity). Involved in V(D)J recombination by acting as a cofactor of the RAG complex: acts by stimulating cleavage and RAG protein binding at the 23 bp spacer of conserved recombination signal sequences (RSS) (PubMed:9184213). Proposed to be involved in the innate immune response to nucleic acids by acting as a cytoplasmic promiscuous immunogenic DNA/RNA sensor which cooperates with subsequent discriminative sensing by specific pattern recognition receptors (PubMed:19890330). In the extracellular compartment acts as a chemokine. Promotes proliferation and migration of endothelial cells implicating AGER/RAGE (By similarity). Has antimicrobial activity in gastrointestinal epithelial tissues (By similarity). Involved in inflammatory response to antigenic stimulus coupled with proinflammatory activity (PubMed:25306442). May play a role in germ cell differentiation (PubMed:11262228). Involved in modulation of neurogenesis probably by regulation of neural stem proliferation (PubMed:24391977). Involved in articular cartilage surface maintenance implicating LEF1 and the Wnt/beta-catenin pathway (PubMed:19805379).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202276