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# HMGB2 Antibody

Rabbit mAb
Catalog # AP91400

## Product Information

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|---|---|
| **Application** | WB, IHC, IF, ICC, IP, IHF |
| **Primary Accession** | P26583 |
| **Reactivity** | Rat, Human, Mouse |
| **Clonality** | Monoclonal |
| **Other Names** | HMG 2; HMG B2; HMG-2; HMG2; HMGB2; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 24034 |

## Additional Information

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|---|---|
| **Dilution** | WB 1:1000~1:5000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human HMGB2 |
| **Description** | DNA binding proteins that associates with chromatin and has the ability to bend DNA. Binds preferentially single-stranded DNA. 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). |
| **Storage Condition and Buffer** | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

## Protein Information

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|---|---|
| **Name** | HMGB2 |
| **Synonyms** | HMG2 |
| **Function** | 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 (PubMed:11909973, PubMed:18413230, PubMed:19522541, PubMed:19965638, PubMed:20123072, PubMed:7797075). 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) (By similarity). Proposed to be involved in the innate immune response to nucleic acids by acting as a promiscuous immunogenic DNA/RNA sensor which cooperates with subsequent discriminative sensing by specific pattern recognition receptors (By similarity). In the extracellular compartment acts as a chemokine. Promotes proliferation and migration of endothelial cells implicating AGER/RAGE (PubMed:19811285). Has antimicrobial activity in gastrointestinal epithelial tissues (PubMed:23877675). Involved in inflammatory response to antigenic stimulus coupled with pro- inflammatory activity (By similarity). Involved in modulation of neurogenesis probably by regulation of neural stem proliferation (By similarity). Involved in articular cartilage surface maintenance implicating LEF1 and the Wnt/beta-catenin pathway (By similarity).

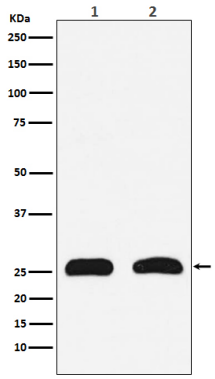
**Cellular Location**

Nucleus. Chromosome. Cytoplasm. Secreted. Note=In basal state predominantly nuclear.

**Tissue Location**

Expressed in gastric and intestinal tissues (at protein level).

## Images




Western blot analysis of HMGB2 expression in (1) HeLa cell lysate; (2) PC-12 cell lysate.