

## **HMGB2 Antibody**

Rabbit mAb Catalog # AP91400

#### **Specification**

## **HMGB2 Antibody - Product Information**

Application WB, IHC, ICC, IP

Primary Accession
Reactivity
Rat
Clonality
Monoclonal

**Other Names** 

HMG 2; HMG B2; HMG-2; HMG2; HMGB2;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 24034 Da

# **HMGB2 Antibody - Additional Information**

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).

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.

#### **HMGB2 Antibody - Protein Information**

Storage Condition and Buffer

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: <a href="http://www.uniprot.org/citations/11909973" target=" blank">11909973</a>, PubMed:<a href="http://www.uniprot.org/citations/18413230" target="blank">18413230</a>, PubMed:<a href="http://www.uniprot.org/citations/19522541" target="\_blank">19522541</a>, PubMed:<a href="http://www.uniprot.org/citations/19965638" target="blank">19965638</a>, PubMed:<a href="http://www.uniprot.org/citations/20123072" target="blank">20123072</a>, PubMed:<a href="http://www.uniprot.org/citations/7797075" target="blank">7797075</a>). Involved in V(D)] 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: <a href="http://www.uniprot.org/citations/19811285" target=" blank">19811285</a>). Has antimicrobial activity in gastrointestinal epithelial tissues (PubMed: <a href="http://www.uniprot.org/citations/23877675" target="blank">23877675</a>). 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).

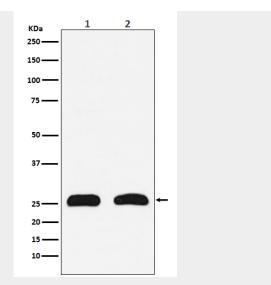
## **HMGB2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### **HMGB2 Antibody - Images**





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