

KD-Validated Anti-High mobility group box 2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1447

Product Information

Application	WB, ICC
Primary Accession	P26583
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB4490
Calculated MW	24034
Gene Name	HMGB2
Aliases	HMGB2; High Mobility Group Box 2; HMG2; High-Mobility Group (Nonhistone Chromosomal) Protein 2; High Mobility Group Protein B2; High Mobility Group Protein 2; HMG-2; High-Mobility Group Box 2
Immunogen	A synthesized peptide derived from human HMGB2

Additional Information

Gene ID	3148
Other Names	High mobility group protein B2, High mobility group protein 2, HMG-2, HMGB2, HMG2

Protein Information

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).

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