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Anti-HMGB2 Picoband Antibody

Catalog # ABO11620

Product Information

Application	WB, IHC-P
Primary Accession	P26583
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for High mobility group protein B2(HMGB2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3148
Other Names	High mobility group protein B2, High mobility group protein 2, HMG-2, HMGB2, HMG2
Calculated MW	24034
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Nucleus . Chromosome . Cytoplasm . Secreted . In basal state predominantly nuclear. .
Tissue Specificity	Expressed in gastric and intestinal tissues (at protein level). .
Source	Eukaryota
Protein Name	High mobility group protein B2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human HMGB2 (65-97aa KSDKARYDREMKNYVPPKGDKKGKKKDPNAPKR), identical to the related mouse and rat sequences.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

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).

Background

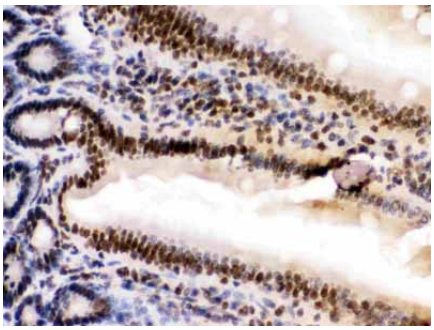
High-mobility group protein B2, also known as high-mobility group protein 2 (HMG-2), is a protein that in humans is encoded by the HMGB2 gene. This gene encodes a member of the non-histone chromosomal high mobility group protein family. The proteins of this family are chromatin-associated and ubiquitously 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.

Images

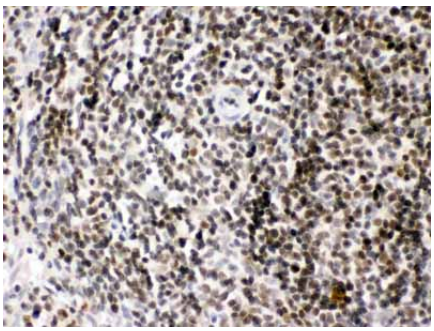
Western blot analysis of HMGB2 expression in rat liver extract (lane 1) and human placenta extract (lane 2).



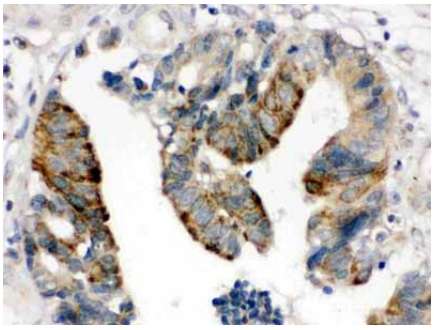
HMGB2 at 24KD was detected using rabbit anti- HMGB2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11620) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .



HMGB2 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti- HMGB2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11620) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .



HMGB2 was detected in paraffin-embedded sections of rat spleen tissues using rabbit anti- HMGB2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11620) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .



HMGB2 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- HMGB2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11620) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.