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

Rabbit monoclonal antibody
Catalog # AGI1447

Specification

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

Application	**WB, ICC**
Primary Accession	P26583
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 24 kDa , observed, 24 kDa KDa**
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**

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

Gene ID	**3148**

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

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

href="http://www.uniprot.org/citations/19965638" target="_blank">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.

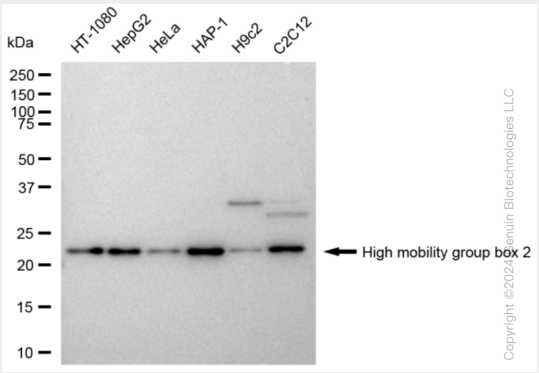
Tissue Location
Expressed in gastric and intestinal tissues (at protein level).

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

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



Western blotting analysis using anti-High mobility group box 2 antibody (Cat#AGI1447). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-High mobility group box 2 antibody (Cat#AGI1447, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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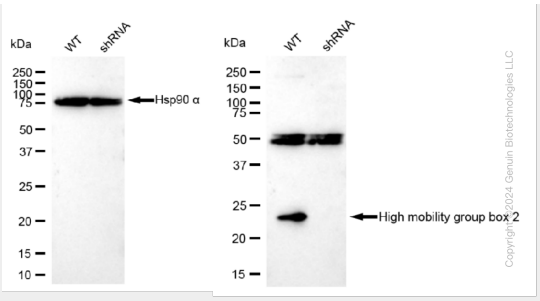
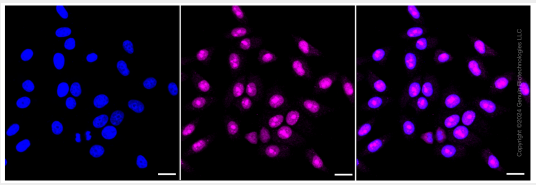


Western blotting analysis using anti-High mobility group box 2 antibody (Cat#AGI1447). High mobility group box 2 expression in wild type (WT) and High mobility group box 2 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-High mobility group box 2 antibody (Cat#AGI1447, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of HepG2 cells with High mobility group box 2 antibody (Cat#AGI1447, 1:1,000). Nuclei were stained blue with DAPI; High mobility group box 2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.