# Anti-HMGB1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014193

## Product Information

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| Application | WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA |
| Reactivity | Mouse, Human, Rat |
| Dilution | WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Clone No. | 20M98D47 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthesized peptide derived from human HMGB1 |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | Anti-HMGB1 Rabbit mAb [20M98D47] is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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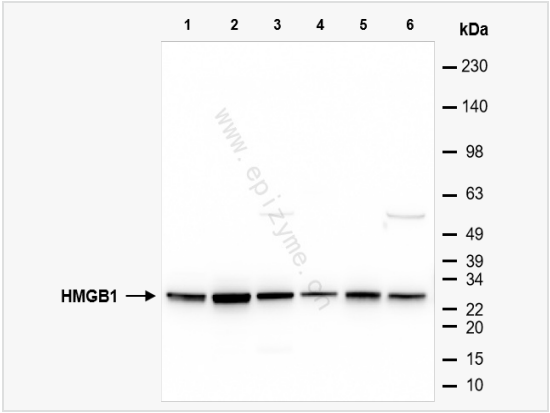
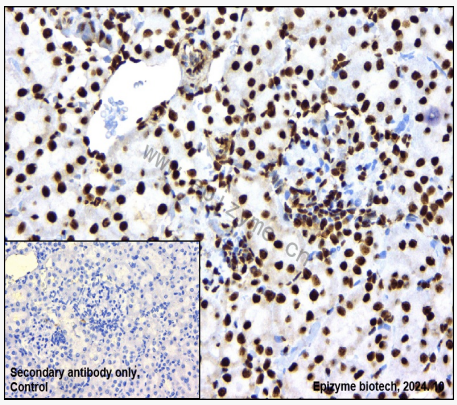
| Synonyms | Amphoterin, Chromosomal protein, nonhistone, HMG1, DKFZp686A04236, High mobility group 1, High mobility group box 1, High mobility group protein 1, High mobility group protein B1, high-mobility group (nonhistone chromosomal) protein 1, HMG-1, HMG1, HMG3, HMGB 1, HMGB1, HMGB1_HUMAN, NONHISTONE CHROMOSOMAL PROTEIN HMG1, SBP 1, Sulfoglucuronyl carbohydrate binding protein. |
| Calculated MW | Calculated MW: 25 kDa; Observed MW: 25 kDa |
| Uniprot ID | P09429 |
| Gene ID | 3146 |
| Background | High mobility group (HMG) proteins 1 and 2 are ubiquitous non-histone components of chromatin. Evidence suggests that the binding of HMG proteins to DNA induces alterations in the DNA architecture including DNA bending and unwinding of the helix. HMG proteins synergize with Oct-2, members of the NFκB family, ATF-2 and c-Jun to activate transcription. |
| Cellular Location | Nucleus. Chromosome. Cytoplasm. Secreted. Cell membrane. Endosome. Endoplasmic reticulum-Golgi intermediate compartment. In basal state predominantly nuclear. Shuttles between the cytoplasm and the nucleus (PubMed:12231511, PubMed:17114460). Translocates from the nucleus to the cytoplasm upon autophagy stimulation (PubMed:20819940). Release from macrophages in the extracellular milieu requires the activation of NLRC4 or NLRP3 inflammasomes (By similarity). Passively released to the extracellular milieu from necrotic cells by diffusion, involving the fully reduced HGMB1 which subsequently gets oxidized (PubMed:19811284). Also released from apoptic cells (PubMed:16855214, PubMed:18631454). Active secretion from a variety of immune and non-immune cells such as macrophages, monocytes, neutrophils, dendritic cells and natural killer cells in response to various stimuli such as LPS and cytokines involves a nonconventional secretory process |

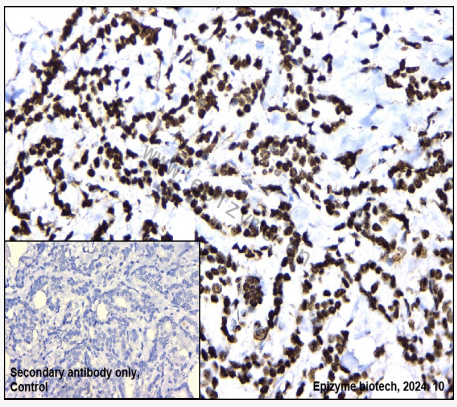
## Validation Images



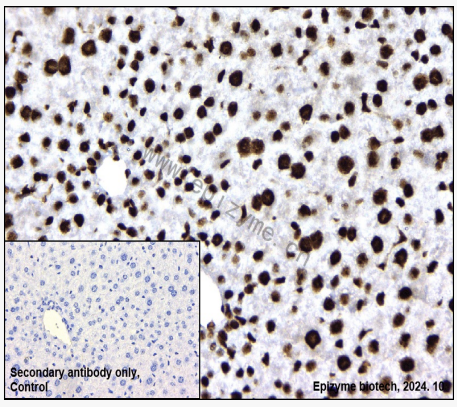

Western Blot - Anti-HMGB1 Rabbit mAb [20M98D47]
All lanes: R014193 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 3: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates
Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lane 6: Rat heart whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 25 kDa
Observed band size: 25 kDa
Developed using the ECL technique (Cat. No. SQ201).



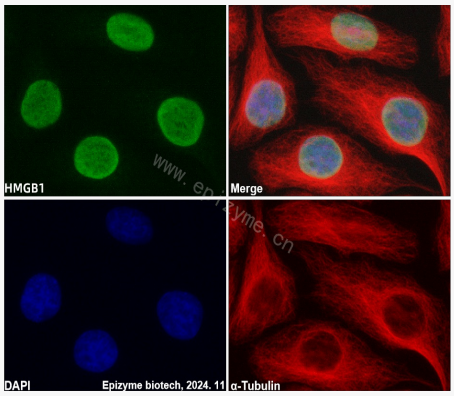

Immunohistochemistry - Anti-HMGB1 Rabbit mAb [20M98D47]
Sample: Paraformaldehyde-fixed, paraffin embedded rat kidney tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014193 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.




Immunohistochemistry - Anti-HMGB1 Rabbit mAb [20M98D47]
Sample: Paraformaldehyde-fixed, paraffin embedded human breast cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014193 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.




Immunohistochemistry - Anti-HMGB1 Rabbit mAb [20M98D47]
Sample: Paraformaldehyde-fixed, paraffin embedded mouse liver tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014193 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.




Immunofluorescence - Anti-HMGB1 Rabbit mAb [20M98D47]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R014193 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).