

Anti-HMGB1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

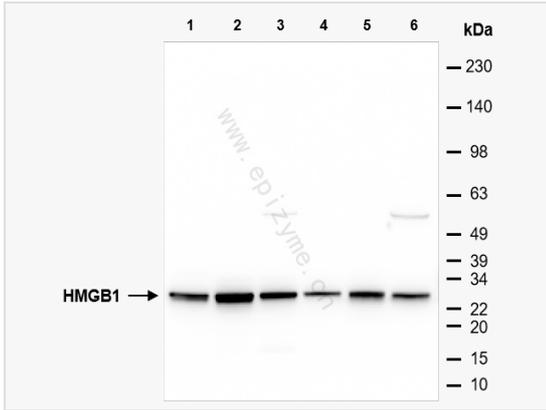
Catalog # R014193

Product Information

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

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 NLR4 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 apoptotic 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



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

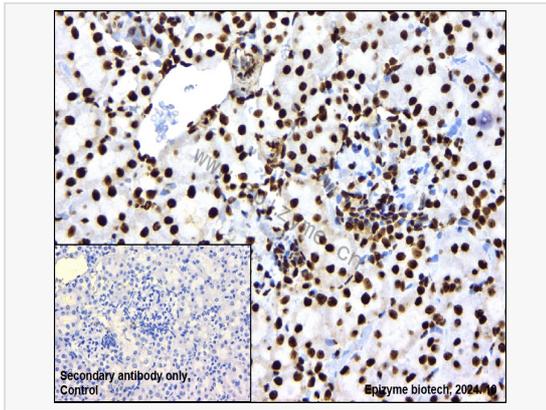
Lysates/proteins at 10 µg per lane.

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

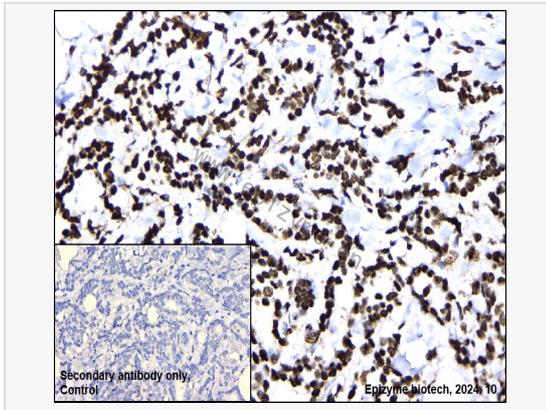
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

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

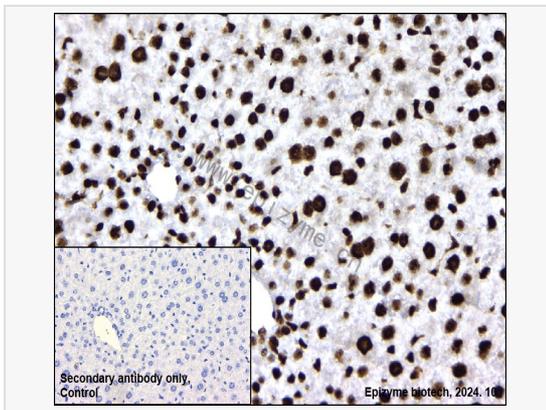
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

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

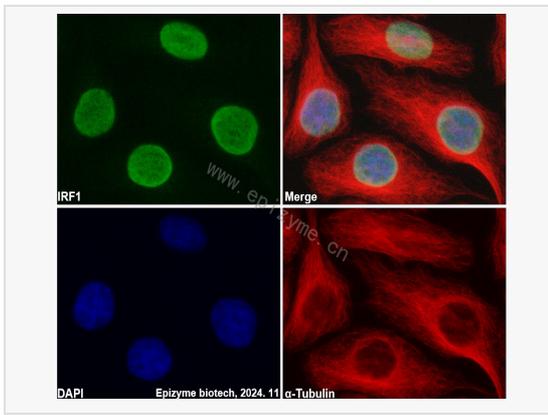
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

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).