

Datasheet for 600-401-BS2

HMGB1 Antibody

Overview

Description:	Anti-HMGB1 (RABBIT) Antibody - 600-401-BS2
Item No.:	600-401-BS2
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The high-mobility group box 1 (HMGB1) protein was originally identified as a highly conserved nuclear DNA-binding protein that participates in DNA replication, repair and transcriptional regulation of gene expression (1,2). However, HMGB1 has more recently emerged as an extracellularly released mediator of inflammation and repair responses in lipopolysaccharide (LPS)-induced endotoxemia and sepsis (3). HMGB1 has also been suggested to induce secretion of pro-inflammatory cytokines and chemokines by inducing NF-κB signaling downstream of Toll-like receptor (TLR) 2 and TLR4 activation (4).
Synonyms:	HMGB1 Antibody, HMG1, HMG3, SBP-1, HMG1, High mobility group protein B1, High mobility group protein 1, HMG-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	HMGB1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-HMGB1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 19 amino acid peptide near the internal region of human HMGB1.

Purity/Specificity: Anti-HMGB1 antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. HMGB1 antibody is human, mouse and rat reactive.

Relevant Links:

- [UniProtKB - P09429](#)
- [GeneID - 3146](#)
- [NCBI - NP_002119](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-HMGB1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 25 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000 - 1:20,000

IF: 20 µg/mL

IHC: 1-2 µg/mL

WB: 1 µg/ml

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

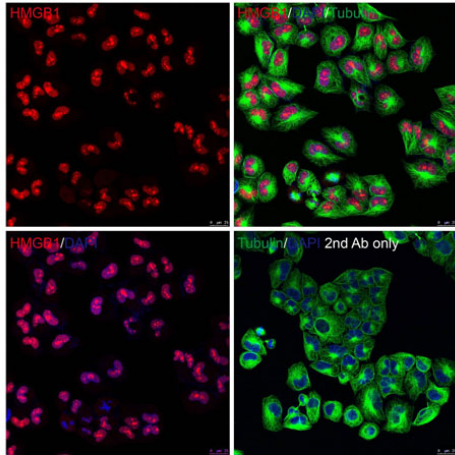
Shipping & Handling

Shipping Condition: Wet Ice

Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

Expiration: Expiration date is one (1) year from date of receipt.

Images



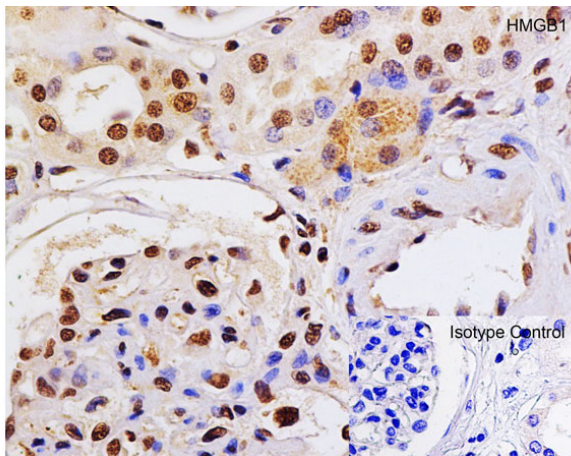
Immunofluorescence Microscopy

Immunofluorescence of HMGB1.

Cell: HeLa cells.

Fixation: PFA-fixed.

Primary Antibodies: HMGB1 at 20 $\mu\text{g}/\text{mL}$ followed by goat anti-rabbit IgG antibody at 1:1000 dilution (red) and Hoechst staining (blue); alpha tubulin stained with anti-alpha tubulin antibody following by goat anti-mouse IgG antibody (green). Images were captured with confocal microscopy.



Immunohistochemistry

Immunohistochemistry of HMGB1.

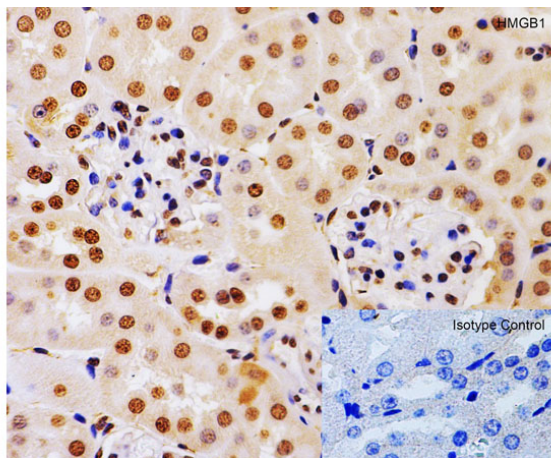
Tissue: Human Kidney Tissue.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-HMGB1 antibody at 2 $\mu\text{g}/\text{ml}$ overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 was used as secondary. Counter stained with Hematoxylin.



Immunohistochemistry

Immunohistochemistry of HMGB1.

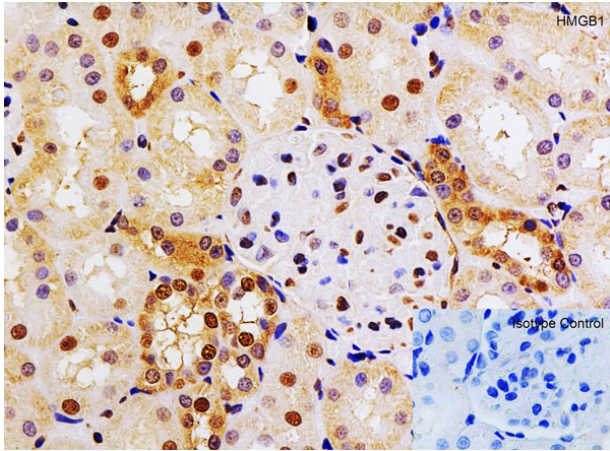
Tissue: Mouse Kidney Tissue.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-HMGB1 antibody at 2 $\mu\text{g}/\text{ml}$ overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 was used as secondary. Counter stained with Hematoxylin.

**Immunohistochemistry**

Immunohistochemistry of HMGB1.

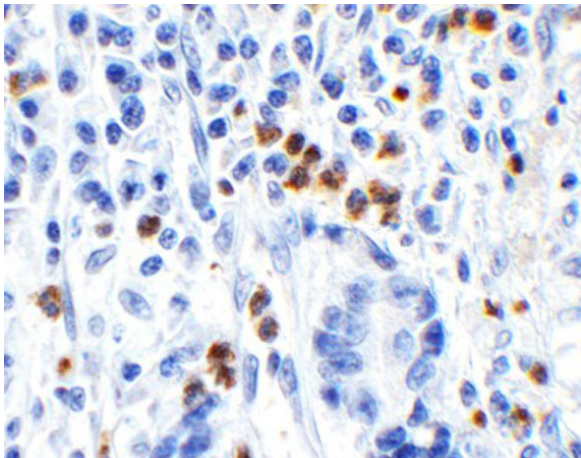
Tissue: Rat Kidney Tissue.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-HMGB1 antibody at 2 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 was used as secondary. Counter stained with Hematoxylin.

**Immunohistochemistry**

Immunohistochemistry of HMGB1.

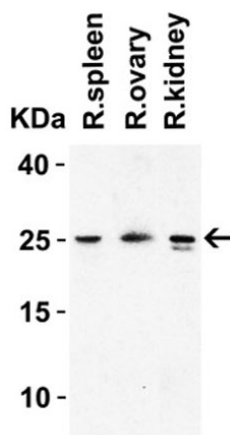
Tissue: Human Stomach Tissue.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-HMGB1 antibody at 1 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 was used as secondary. Counter stained with Hematoxylin.

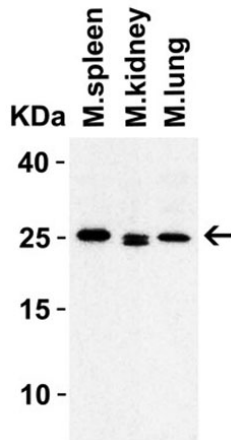
**Western Blot**

Western Blot of HMGB1.

Load: 15µg of rat tissue lysates.

Primary Antibody: HMGB1 at 1µg/mL for 1h incubation at RT in 5% NFDN/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



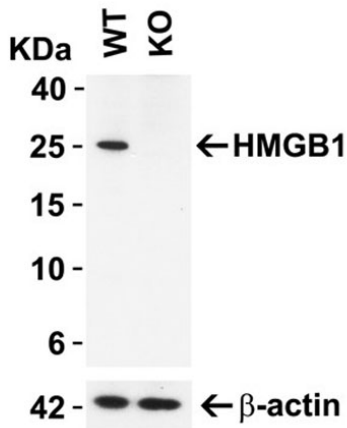
Western Blot

Western Blot of HMGB1.

Load: 15µg of mouse tissue lysates.

Primary Antibody: HMGB1 at 1µg/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



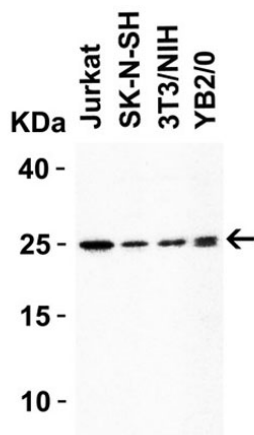
Western Blot

Western Blot of HMGB1.

Load: 10µg of HeLa WT or HMGB1 KO cell lysates.

Primary Antibody: HMGB1 at 0.5µg/mL and beta-actin at 1µg/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot

Western Blot of HMGB1.

Load: 15µg of human, mouse, or rat cell line lysates.

Primary Antibody: HMGB1 at 1µg/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.

Disclaimer

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