Datasheet for ABIN7127545

# Recombinant anti-HMGB1 antibody

2 Images

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## Overview

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|---|---|
| Quantity: | 100 µL |
| Target: | HMGB1 |
| Reactivity: | Human |
| Host: | Rabbit |
| Antibody Type: | Recombinant Antibody |
| Clonality: | Monoclonal |
| Conjugate: | This HMGB1 antibody is un-conjugated |
| Application: | Western Blotting (WB), ELISA, Immunohistochemistry (IHC) |

## Product Details

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| Immunogen: | A synthesized peptide derived from human HMGB1 |
| Clone: | 1A1 |
| Isotype: | IgG |
| Cross-Reactivity: | Human |
| Purification: | Affinity-chromatography |

## Target Details

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| Target: | HMGB1 |
| Alternative Name: | HMGB1 (HMGB1 Products) |
| Background: | Background: Multifunctional redox sensitive protein with various roles in different cellular |

## Target Details

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| | compartments. In the nucleus is one of the major chromatin-associated non-histone proteins and acts as a DNA chaperone involved in replication, transcription, chromatin remodeling, V(D)J recombination, DNA repair and genome stability. Proposed to be an universal biosensor for nucleic acids. Promotes host inflammatory response to sterile and infectious signals and is involved in the coordination and integration of innate and adaptive immune responses. In the cytoplasm functions as sensor and/or chaperone for immunogenic nucleic acids implicating the activation of TLR9-mediated immune responses, and mediates autophagy. Acts as danger associated molecular pattern (DAMP) molecule that amplifies immune responses during tissue injury (PubMed:27362237). Released to the extracellular environment can bind DNA, nucleosomes, IL-1 beta, CXCL12, AGER isoform 2/sRAGE, lipopolysaccharide (LPS) and lipoteichoic acid (LTA), and activates cells through engagement of multiple surface receptors. In the extracellular compartment fully reduced HMGB1 (released by necrosis) acts as a chemokine, disulfide HMGB1 (actively secreted) as a cytokine, and sulfonyl HMGB1 (released from apoptotic cells) promotes immunological tolerance (PubMed:23519706, PubMed:23446148, PubMed:23994764, PubMed:25048472). Has proangiogdenic activity (By similarity). May be involved in platelet activation (By similarity). Binds to phosphatidylserine and phosphatidylethanolamide (By similarity). Bound to RAGE mediates signaling for neuronal outgrowth (By similarity). May play a role in accumulation of expanded polyglutamine (polyQ) proteins such as huntingtin (HTT) or TBP (PubMed:23303669, PubMed:25549101).<br>Aliases: High mobility group protein B1 (High mobility group protein 1) (HMG-1), HMGB1, HMG1 |
| UniProt: | P09429 |
| Pathways: | p53 Signaling, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development, Positive Regulation of Endopeptidase Activity, Regulation of Carbohydrate Metabolic Process, Toll-Like Receptors Cascades, Smooth Muscle Cell Migration, Inflammasome |

## Application Details

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| Application Notes: | Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol. |

## Handling

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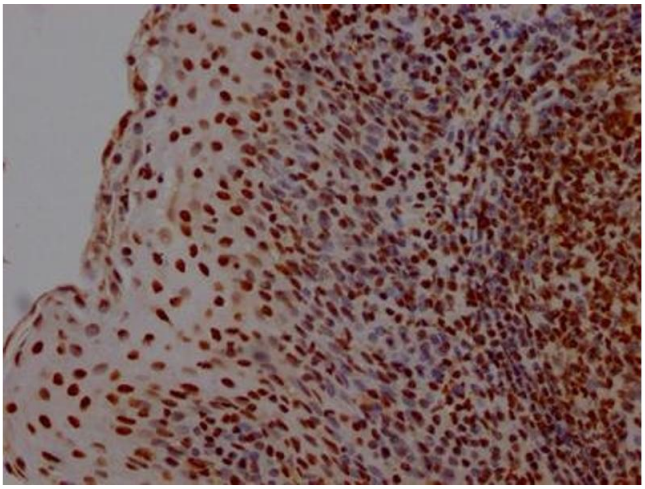
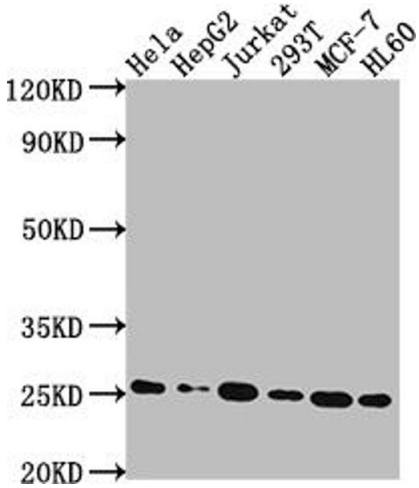
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | -20 °C,-80 °C |
| Storage Comment: | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |

## Images



**Immunohistochemistry**

**Image 1.** IHC image of ABIN7127545 diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer ( pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.




**Western Blotting**

**Image 2.** Western Blot Positive WB detected in: Hela whole cell lysate, HepG2 whole cell lysate, Jurkat whole cell lysate, 293T whole cell lysate, MCF-7 whole cell lysate, HL60 whole cell lysate All lanes: HMGB1 antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 25 kDa Observed band size: 25 kDa