Datasheet for ABIN1169271

# Recombinant anti-HMGB1 antibody (Biotin)

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## Overview

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| Quantity: | 100 µg |
| Target: | HMGB1 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Human |
| Antibody Type: | Recombinant Antibody |
| Clonality: | Monoclonal |
| Conjugate: | This HMGB1 antibody is conjugated to Biotin |
| Application: | Western Blotting (WB), ELISA |

## Product Details

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| Immunogen: | Human recombinant HMGB1. |
| Clone: | Giby-1-4 |
| Isotype: | IgG2 |
| Specificity: | Recognizes human, mouse and rat HMGB1. |
| Cross-Reactivity: | Human, Mouse (Murine), Rat (Rattus) |
| Purification: | Purified from HEK 293 cell culture supernatant. |
| Purity: | >95 % (SDS-PAGE) |

## Target Details

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|---|---|
| Target: | HMGB1 |

## Target Details

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| Alternative Name: | HMGB1 (HMGB1 Products) |
| Background: | HMGB1 was originally discovered as an essential DNA-binding protein for regulating p53, NF-kappaB and other important proteins. It is secreted from activated dentric cells, macrophage and nectrotic cells, and acts as a ligand for RAGE, TLR-2 and TLR-4 expressed on surrounding cells. As a result, HMGB1 activates Rac, CDC42 and NF-kappaB inducing localized innate immunity of damaged tissue, tissue regeneration by recruitment of stem cells and hemostasis by induction of tissue factor expression. HMGB1 is also a causative agent of various diseases as it causes localized inflammation such as arteriosclerosis, chronic rheumatoid arthritis and nephritis. Anti-HMGB1, mAb (recombinant) (Giby-1-4) (Biotin) is an antibody developed by antibody phage display technology using a human naive antibody gene library. These libraries consist of scFv (single chain fragment variable) composed of VH (variable domain of the human immunoglobulin heavy chain) and VL (variable domain of the human immunoglobulin light chain) connected by a polypeptide linker. The antibody fragments are displayed on the surface of filamentous bacteriophage (M13). This scFv was selected by affinity selection on antigen in a process termed panning. Multiple rounds of panning are performed to enrich for antigen-specific scFv-phage. Monoclonal antibodies are subsequently identified by screening after each round of selection. The selected monoclonal scFv is cloned into an appropriate vector containing a Fc portion of interest and then produced in mammalian cells to generate an IgG like scFv-Fc fusion protein. |
| 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: | Optimal working dilution should be determined by the investigator. |
| Comment: | HMGB1, monoclonal antibody (recombinant) (Giby-1-4) (Biotin) is composed of human variable regions (VH and VL) (lambda-chain) of immunoglobulin fused to the human IgG2 Fc domain. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Concentration: | Lot specific |

## Handling

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| Buffer: | In PBS containing 10 % glycerol and 0.02 % sodium azide. |
| 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: | 4 °C,-20 °C |
| Storage Comment: | Short Term Storage: +4°C<br>Long Term Storage: -20°C<br>Stable for at least 1 month after receipt when stored at +4°C. Stable for at least 1 year after receipt when stored at -20°C. |
| Expiry Date: | 12 months |