# Active Recombinant Human HMGB1 Protein (Met1-Asp169, C23A, C45A), N-His-SUMO tagged, Animal-free, Carrier-free

**Cat. No.** HMGB1-143H **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | Recombinant Human HMGB1 Protein (Met1-Asp169, C23A, C45A) with N-His-SUMO tag was expressed in HEK293 and Animal-free as well as Carrier-free. |
| **Species** | Human |
| **Source** | HEK293 |
| **ProteinLength** | Met1-Asp169 |
| **Description** | High Mobility Group protein B1 protein (HMGB1) is the high mobility group box family of non-histone chromosomal proteins. Human HMGB1 is expressed as a 25 kDa single chain polypeptide containing three domains: two N-terminal HMG boxes A and B, and a negatively charged 30 a.a. C-terminal region that contains only Asp and Glu. Post-translational modification on HMGB1 have been reported, affects its localization, receptor interactions, and function. HMGB1, with a disulfide bond between C23 and C45 , have been reported that cause cytokine production and the activation of NF-κB. Therefore, we developed the HMGB1 C23A& C45A mutant proteins, eliminant the disulfide bond formation. |
| **Form** | Lyophilized |
| **Bio-activity** | Measure by its ability to induce TNF alpha in RAW264.7 cells. The ED50 for this effect is < 10 μg/mL. |

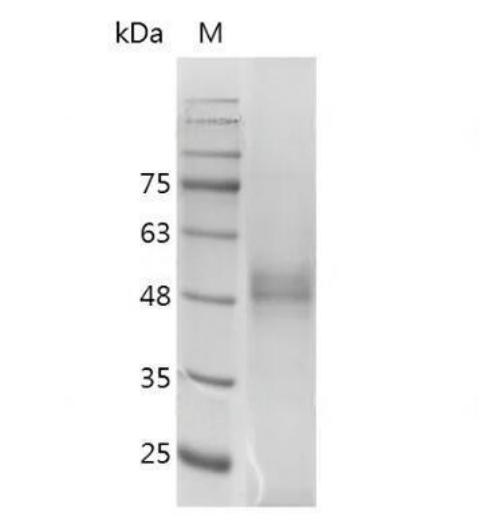
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| **Molecular Mass** | The protein has a calculated MW of 36.36 kDa.<br>The protein migrates as 35-48 kDa under reducing condition (SDS-PAGE analysis). |
| **Endotoxin** | < 0.1 EU/μg of the protein by the LAL method. |
| **Purity** | >98% as determined by SDS-PAGE analysis. |
| **Storage** | This product is stable after storage at:<br>-20 centigrade for 12 months in lyophilized state from date of receipt.<br>-20 or -80 centigrade for 1 month under sterile conditions after reconstitution.<br>Avoid repeated freeze/thaw cycles. |
| **Storage Buffer** | Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. |
| **Reconstitution** | It is recommended to reconstitute the lyophilized protein in sterile H2O to a concentration not less than 200 μg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved. |
| **Shipping** | The product is shipped with polar packs. Upon receipt, store it immediately at -20 centigrade or lower for long term storage. |

## GENE INFORMATION

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| **Gene Name** | HMGB1 high mobility group box 1 [ Homo sapiens (human) ] |
| **Official Symbol** | HMGB1 |
| **Synonyms** | HMGB1; high mobility group box 1; high mobility group (nonhistone chromosomal) protein 1 , high mobility group box 1 , HMG1; high mobility group protein B1; Amphoterin; DKFZp686A04236; high mobility group protein 1; HMG3; SBP 1; Sulfoglucuronyl carbohydrate binding protein; HMG-1; high-mobility group box 1; |

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| | high-mobility group (nonhistone chromosomal) protein 1; HMG1; SBP-1; |
| **Gene ID** | 3146 |
| **mRNA Refseq** | NM_002128 |
| **Protein Refseq** | NP_002119 |
| **MIM** | 163905 |
| **UniProt ID** | P09429 |
| **SDS-PAGE analysis of recombinant human HMGB1 C23AC45A.** |  |



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