

## Human HMGB1 (C23A, C45A, C106A), His-SUMO Tag, HEK293

**Catalog Number** LDG003PHM

**Package** 5 µg / 20 µg / 100 µg / Customized package

For full product information, images and publications, please visit [our website](#).



### Specifications

#### Species of Origin

Human

#### Affinity Tag

His-SUMO Tag (N-term)

#### Purity

>98% as determined by SDS-PAGE analysis.

#### Activity

Measure by its ability to induce TNF alpha in RAW264.7 cells. The ED<sub>50</sub> for this effect is <10 µg/mL.

#### Form

Lyophilized

#### Expression System

HEK293 cell

#### Storage Buffer

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

#### Molecular weight

The protein has a calculated MW of 36.33 kDa. The protein migrates as 35-48 kDa under reducing condition (SDS-PAGE analysis).

#### Endotoxin Level

<0.1 EU per 1 µg of the protein by the LAL method.

### Background

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### Background

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, affect 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- $\kappa$ B. Otherwise, the fully oxidized form has no immune function, losing its proinflammatory effect and the apoptotic cell death activation function. Here, we developed HMGB1 C23A, C45A & 106A mutant proteins, the fully oxidized HMGB1, eliminant the disulfide bond formation.

### Uniprot ID

#P09429

### Synonyms

High mobility group protein B1, High mobility group protein 1, HMG-1

### Sequence Note

Met1-Asp169

## Instruction

### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 200  $\mu$ g/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°C or lower for long term storage.

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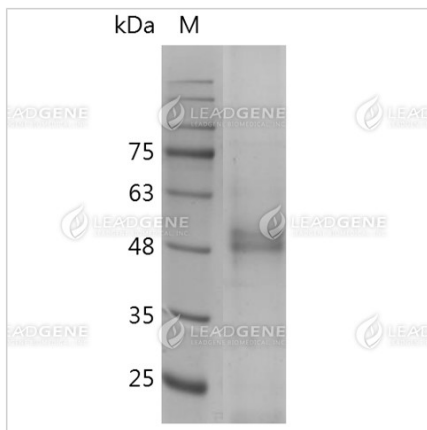
### Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

### Image



SDS-PAGE analysis of  
recombinant human HMGB1  
C23AC45AC106A.

**Disclaimer :** For Research Use or Further Manufacturing Only.

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