

# 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 $_{50}$  for this effect is <10  $\mu g/mL$ .

**Form** 

Lyophilized

**Expression system** 

**HEK293** 

**Buffer** 

Lyophilized from a 0.2  $\mu m$  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**



#### **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-kB. 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  $H_2O$  to a concentration of 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.



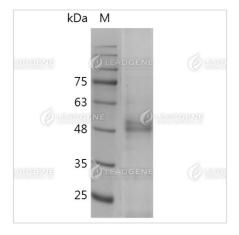
## Stability & Storage

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.

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