

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

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

Tainan Headquarter

Innovation & Research Center

CLD Center



Background

High Mobility Group protein B1 protein (HMGB1) is the high mobility group box family of nonhistone 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.

Synonyms

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

Uniprot ID

#P09429

Sequence Note

Met1-Asp169

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H_2O to a concentration not less than 200 μ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.



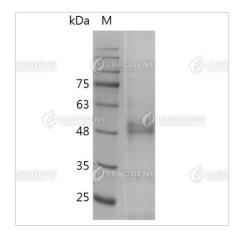
Stability & Storage

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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