Active Recombinant Human HMGB1 Protein (Met1-Asp169, C23A, C45A, C106A), N-His-SUMO tagged, Animal-free, Carrier-free

Cat. No. HMGB1-144H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HMGB1 Protein (Met1-Asp169, C23A, C45A, C106A) 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, 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-κB. 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.
Form	Lyophilized

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Bio-activity	Measure by its ability to induce TNF alpha in RAW264.7 cells. The ED50 for this effect is < 10 μg/mL.
Molecular Mass	The protein has a calculated MW of 36.33 kDa. 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: -20 centigrade for 12 months in lyophilized state from date of receipt. -20 or -80 centigrade for 1 month under sterile conditions after reconstitution. 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

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)

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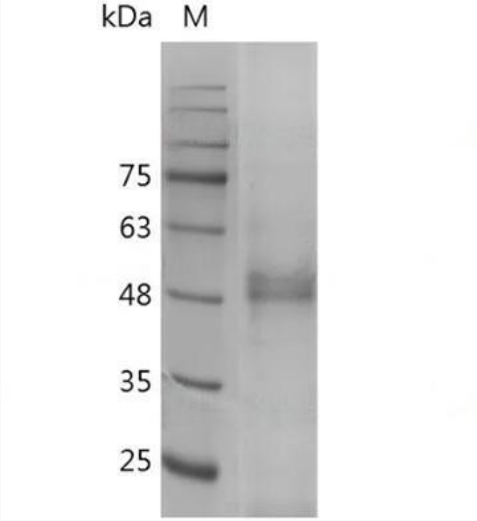
	protein 1 , high mobility group box 1 , HMG1; high mobility group protein B1; Amphoterin; DKFZp686A04236; high mobility group protein 1; HMG3; SBP 1; Sulfoglucuronyl carbohydrate binding protein; HMG-1; high-mobility group box 1; high-mobility group (nonhistone chromosomal) protein 1; HMG1; SBP-1;
Gene ID	3146
mRNA Refseq	NM_002128
Protein Refseq	NP_002119
MIM	163905
UniProt ID	P09429
SDS-PAGE analysis of recombinant human HMGB1 C23AC45AC106A.	

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