

Recombinant Human HMGB1 protein, Mouse IgG2a Fc-tagged, low endotoxin

Cat. No. HMGB1-363H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HMGB1 protein (Gly2-Glu215)(low endotoxin), fused to Mouse IgG2a Fc tag at N-terminus, was expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	214
Description	High-mobility group protein B1 (HMGB1) is also known as high-mobility group protein 1 (HMG-1) and amphoterin, is a member of the HMGB family consisting of three members, HMGB1, HMGB2 and HMGB3. HMGB1 is a non-histone architectural chromosomal protein ubiquitously present in all vertebrate nuclei and binds double-stranded DNA without sequence specificity. The mechanism of inflammation and damage is binding to TLR4, which mediates HMGB1-dependent activation of macrophage cytokine release. This positions HMGB1 at the intersection of sterile and infectious inflammatory responses. HMGB1 has been studied as a DNA vaccine adjuvant and a target for cancer therapy.
Form	Lyophilized from 0.22 um filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 51.6 kDa. The protein migrates as 60 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Endotoxin	Less than 0.1 EU per ug by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name	HMGB1
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; high-mobility group (nonhistone chromosomal) protein 1; HMG1; SBP-1
Gene ID	3146
mRNA Refseq	NM_002128
Protein Refseq	NP_002119

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

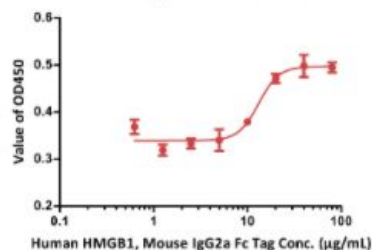
 45-1 Ramsey Road, Shirley, NY 11967, USA

MIM 163905

UniProt ID P09429

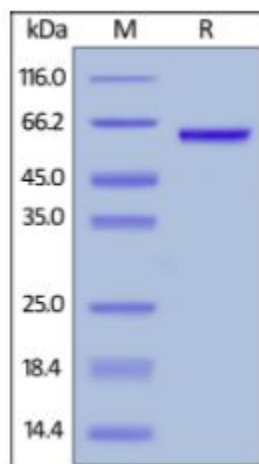
**Bioactivity-Cell
based assay of
HMGB1-363H**

Human HMGB1 stimulates production of TNF- α in Raw-246.7 cells



Human HMGB1, Mouse IgG2a Fc Tag, low endotoxin stimulates production of TNF- α in Raw-246.7 cells. The EC₅₀ for this effect is 13.18 μ g/mL (Routinely tested).

**SDS-PAGE of
HMGB1-363H**



Human HMGB1, Mouse IgG2a Fc Tag, low endotoxin on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA