

Recombinant Human HMGB1 Protein (M1-E215), Tag Free

Cat. No. HMGB1-0715H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human GG-HMGB1(M1-E215 end) Protein was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	M1-E215
Description	Multifunctional redox sensitive protein with various roles in different cellular compartments. In the nucleus is one of the major chromatin-associated non-histone proteins and acts as a DNA chaperone involved in replication, transcription, chromatin remodeling, V(D)J recombination, DNA repair and genome stability (Ref.71). Proposed to be an universal biosensor for nucleic acids. Promotes host inflammatory response to sterile and infectious signals and is involved in the coordination and integration of innate and adaptive immune responses. In the cytoplasm functions as sensor and/or chaperone for immunogenic nucleic acids implicating the activation of TLR9-mediated immune responses, and mediates autophagy. Acts as danger associated molecular pattern (DAMP) molecule that amplifies immune responses during tissue injury. Released to the extracellular environment can bind DNA, nucleosomes, IL-1 beta, CXCL12, AGER isoform 2/sRAGE, lipopolysaccharide (LPS) and lipoteichoic acid (LTA), and activates cells through engagement of multiple surface receptors. In the extracellular compartment fully reduced HMGB1 (released by necrosis) acts as a chemokine, disulfide HMGB1 (actively secreted) as a cytokine, and sulfonyl HMGB1 (released from apoptotic cells) promotes immunological

 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

tolerance. Has proangiogenic activity. May be involved in platelet activation. Binds to phosphatidylserine and phosphatidylethanolamide. Bound to RAGE mediates signaling for neuronal outgrowth. May play a role in accumulation of expanded polyglutamine (polyQ) proteins such as huntingtin (HTT) or TBP.

Form	Liquid
Endotoxin	< 0.01 EU per µg of the protein
Purity	80%
Stability	Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade.
Storage	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Storage Buffer	Supplied as sterile 50mM Tris7.5, 200mM NaCl, 20%glycerol, 1mM DTT
Shipping	It is shipped out with blue ice.

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) 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;

 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

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 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