

Recombinant Full Length Mouse high mobility group box 1 Protein, Tag Free

Cat. No. Hmgb1-186M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse HMGB1 protein (P63158) (Met 1-Glu 215) without tag was expressed in HEK293.
Species	Mouse
Source	HEK293
Protein Length	1-215aa
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. 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

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chemokine, disulfide HMGB1 (actively secreted) as a cytokine, and sulfonyl HMGB1 (released from apoptotic cells) promotes immunological tolerance.

Tag	Non
Molecular Mass	25.3 kDa
Endotoxin	Less than 1.0 EU/μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution	Reconstitute at 250 μg/mL in sterile water.

GENE INFORMATION

Gene Name	Hmgb1 high mobility group box 1 [Mus musculus (house mouse)]
Official Symbol	Hmgb1
Synonyms	HMGB1; high mobility group box 1; high mobility group protein B1; high mobility group protein 1; DEF; p30; Hmg1; HMG-1; SBP-1; amphoterin; MGC103168; MGC103169; MGC117896; MGC117897;
Gene ID	15289

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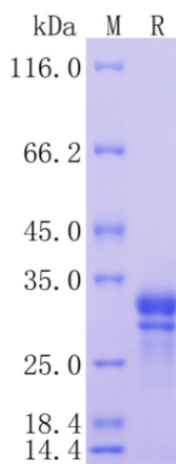
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mRNA Refseq [NM_010439](#)

Protein Refseq [NP_034569](#)

UniProt ID [P63158](#)

Protein on SDS-
PAGE under
reducing (R)
condition.



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