**DATASHEET**
Version 20181206

# HMGB1, His, Human

**Cat. No.**: Z02803-1

**Size**: 1.0 mg

**Synonyms**: High-Mobility Group Box 1 (His6-tagged) ( HMGB1), Human;

**Description:**

Human High-mobility group box 1 protein (HMGB1), previously known as HMG-1 or amphoterin, is a member of the high mobility group box family of non-histone chromosomal proteins. Human HMGB1 is expressed as a 30 kDa, 215 amino acid (aa) single chain polypeptide containing three domains: two N-terminal globular, 70 aa positively charged DNA-binding domains (HMG boxes A and B), and a negatively charged 30 aa C-terminal region that contains only Asp and Glu.4, 5 Residues 27 - 43 and 178 - 184 contain a NLS. Posttranslational modifications of the molecule have been reported, with acetylation occurring on as many as 17 lysine residues. HMGB1 is expressed at high levels in almost all cells. It was originally discovered as a nuclear protein that could bend DNA. Such bending stabilizes nucleosome formation and regulates the expression of select genes upon recruitment by DNA binding proteins.

**Amino Acid Sequence:**

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00001 MGKGDPKKPR GKMSSYAFFV QTCREEHKKK HPDASVNFSE
00041 FSKKCSERWK TMSAKEKGKF EDMAKADKAR YEREMKTYIP
00081 PKGETKKKFK DPNAPKRPPS AFFLFCSEYR PKIKGEHPGL
00121 SIGDVAKKLG EMWNNTAADD KQPYEKKAAK LKEKYEKDIA
00161 AYRAKGKPDA AKKGVVKAEK SKKKKEEEED EEDEEDEEEE
00201 EDEEDEDEEE DDDDELEHHH HHH
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**Source**: *E. coli*

**Species**: Human

**Molecular Weight**: Approximately 26.0 kDa, a single non-glycosylated polypeptide chain containing 223 amino acids with 6 × His at C-terminus.

**Formulation**: Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.

**Appearance**: Sterile Filtered White lyophilized (freeze-dried) powder.

**Reconstitution**: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

**Purity**: > 95 % by SDS-PAGE and HPLC analyses.

**Endotoxin Level**: Less than 1 EU/μg of rHuHMGB1, His as determined by LAL method.

**Storage**: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.



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