RP00010

Leader in Biomolecular Solutions for Life Science

Recombinant Human HMGB1 Protein

Catalog No.: RP00010 Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 3146 P09429

Human

Tags C-His

Synonyms

HMG-1;HMG1;HMG3;SBP-1;HMGB1

Product Information

SourcePHEK293 cells>

Purification > 97% by SDS-PAGE.

Endotoxin

< 1.0 EU/µg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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www.abclonal.com

Background

High-mobility group box 1 protein (HMGB1), also known as HMG-1 or amphoterin previously, is a member of the HMGB family consisting of three members, HMGB1, HMGB2 and HMGB3. Posttranslational modification of HMGB1, including acetylation, phosphorylation, and methylation, affects HMGB1 localization, receptor interactions, and bioactivity. HMGB1 can be localized to the nucleus or cytoplasm and can also be secreted despite its lack of a signal peptide. HMGB1 binds DNA in a non-sequence specific manner and may act as a structural cofactor during gene transcription.Acetylation of HMGB1 results in its cytoplasmic localization and eventual secretion. HMGB1 can be secreted by multiple cell types, and it is also released upon cell necrosis, apoptosis, and pyroptosis.

Basic Information

Description

Recombinant Human HMGB1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Glu215) of human HMGB1 (Accession $\#NP_{002119.1}$) fused with a 6×His tag at the C-terminus.

Bio-Activity

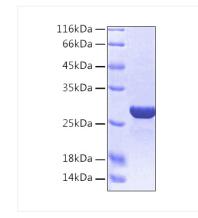
Measured by its binding ability in a functional ELISA. Immobilized Human HMGB1 (Cat: RP) at 2µg/mL (100 µL/well) can bind Human AGER/RAGE (Cat: RP00154) with a linear range of 0.1-42.8 ng/mL.

Storage

Store the lyophilized protein at -20°C to -80 °C for long term.
br>After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.



Validation Data



Immobilized Human HMGB1 (Cat: RP00010) at 2 μ g/mL (100 μ L/well) can bind Human AGER/RAGE (Cat: RP00154) with a linear range of 0.1-42.8 ng/mL.

Active Recombinant Human HMGB1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at approximately 30 kDa.