

Recombinant Human HMGB1 Protein

Catalog No	RP00010	Category	Protein
Description	Recombinant Human HMGB1 Protein is produced by insect cell-baculovirus expression system. The target protein is expressed with sequence (Met1-Glu215) of human HMGB1 (Accession #NP_002119.1).		
Bio-Activity	Measured by its ability to induce TNF-alpha secretion by RAW 264.7 mouse monocyte/macrophage cells. The EC ₅₀ for this effect is typically 20-100µg/ml.		

Sequence Information

Species	Human	Gene ID	3146
Tags	No tag	Swiss Prot	P09429
Synonyms	HMG-1;HMG1;HMG3;SBP-1		
AA Sequence	MGKGDPKKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKTMSAKEKGKF EDMAKADKARYEREMKTYIPPKGETKKKFKDPNAPKRPPSAFFLFCSEYRPKIKGEHPGL SIGDVAKKLGEMWNNTAADDKQPYEKKAALKKEYEKDIAAYRAKGKPDAAKKGVVKAEK SKKKKEEEDEEEDDEEEDEEEDDEEEDDDDE		

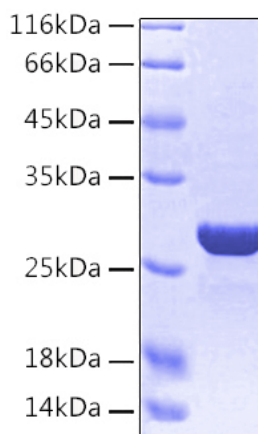
Product information

Source	Baculovirus-Infected Sf9 Cells
Purity	> 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.
Reconstitution	Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
Storage	Store the lyophilized protein at -20°C to -80 °C for long term. 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.

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.

SDS-PAGE



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

Bioactivity