

## Product datasheet for **TP728225S**

### Recombinant HMGB1, Human (mammalian cell expression)

#### Product data:

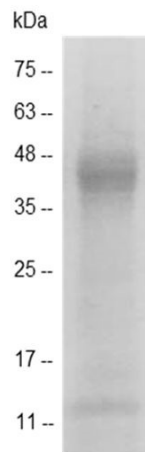
Product Type:	Recombinant Proteins
Description:	Recombinant HMGB1, Human (mammalian cell expression)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	MGKGDPPKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKTMSAKEKGFEDMAKADK ARYEREMKTYIPPKGETKKKFKD PNAPKRPPSAFFLCSEYRPKIKGEHPGLSIGDVAKKLGEMWNNTAADDKQPYEKKAACLKEKYEKDIAAY RAKGKPDAAKGVVKAESKK KKEEEDEEEDDEEEDEEEDDEEEDDDDE with polyhistidine-SUMO tag at the N-terminus
Tag:	His-SUMO Tag (N-term)
Predicted MW:	The protein has a calculated MW of 36.42 kDa. The protein migrates as 35-48 kDa under reducing condition (SDS-PAGE analysis).
Purity:	>98% as determined by SDS-PAGE.
Buffer:	The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 7.4.
Bioactivity:	Measure by its ability to induce TNF alpha in RAW264.7 cells. The ED <sub>50</sub> for this effect is <10 µg/mL.
Endotoxin:	<0.1 EU per 1 µg of the protein by the LAL method.
Reconstitution Method:	Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H <sub>2</sub> O to a concentration not less than 100 µg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.
Applications:	Cell culture
Storage:	Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.
UniProt ID:	<a href="#">P09429</a>
Synonyms:	HMG-1, HMG1, HMG3, SBP-1



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**Summary:**

High mobility group protein B1 protein (HMGB1) is the high mobility group box family of non-histone chromosomal proteins. Human HMGB1 is expressed as a 25 kDa single chain polypeptide containing three domains: two N-terminal HMG boxes A and B, and a negatively charged 30 a.a. C-terminal region that contains only Asp and Glu. Post-translational modification on HMGB1 have been reported, affects its localization, receptor interactions, and function. HMGB1, with a disulfide bond between C23 and C45, have been reported that cause cytokine production and the activation of NF- $\kappa$ B. Otherwise, the fully oxidized form has no immune function, losing its proinflammatory effect and the apoptotic cell death activation function.

**Product images:**

SDS- PAGE analysis of recombinant human HMGB1