

### Product datasheet for TP728225

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

# 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:

MGKGDPKKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKTMSAKEKGKFEDMAKADK

ARYEREMKTYIPPKGETKKKFKD

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 ED₅₀ 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  $H_2O$  to a concentration not less than 100  $\mu g/mL$  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

 $8^{\circ}\text{C}$  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: P09429

Synonyms: HMG-1, HMG1, HMG3, SBP-1

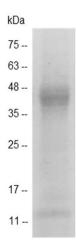




### **Summary:**

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-κB. 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