

## Disulfide-HMGB1, LPS-free

**Product Number:** \*\*\*\*\*  
**Expiration date:** \*\*\*\*\*  
**Batch number:** \*\*\*\*\*  
**Batch concentration:** \*\*\*\*\* mg/mL after addition of  
 \*\*\*\*\*  $\mu$ L of distilled water.

### **Product Description:**

Disulfide-HMGB1 (complete notation: HMGB1C23-C45C106h - Antoine J. *et al* (2014).Mol Med) can induce cytokine and chemokine production in monocytes and other inflammatory cells. This activity depends on a specific redox state of HMGB1 (Venereau *et al*, 2012). This product is produced in *E.coli* and is tested for the ability to stimulate cytokine production in mouse macrophages. The protein is free from LPS (<0.1EU/mL). The product contains <0.006% v/v of Triton X-114 due to LPS removal procedure.

### **Reagent format:**

**The Disulfide-HMGB1 protein we provide is the natural protein, with no tags or additional amino acids.**

The lyophilized protein once reconstituted will be dissolved in a solution containing 50 mM HEPES buffer, pH 7.9 and 500 mM NaCl.

**Storage:** 2-8°C. The protein once resuspended can be stored frozen (-20°C).

### **How to use product:**

The product can be used as a pro-inflammatory mediator (Venereau *et al*, 2012).

### **This product is for research use only**

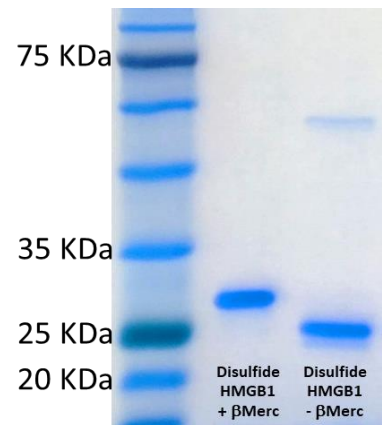
### **References:**

- Ge X. *et al* (2024) Redox-sensitive high-mobility group box-1 isoforms contribute to liver fibrosis progression and resolution in mice J.Hepatol PMID: 37989401
- Zhou X. *et al* (2024) Glycyrrhizin Protects Submandibular Gland Against Radiation Damage by Enhancing Antioxidant Defense and Preserving Mitochondrial Homeostasis. Antioxid Redox Signal PMID: 38069572
- Venereau E. *et al* (2012) Mutually exclusive redox forms of HMGB1 promote cell recruitment or proinflammatory cytokine release J Exp Med. 209: 1519–1528.

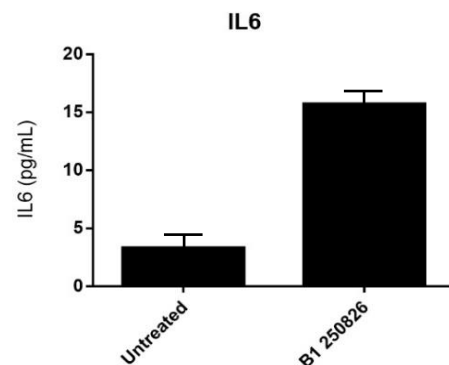
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HPDASVNFSE FSKKCSERWK TMSAKEKGKF
EDMAKADKAR YEREMKTYIP PKGETKPKFK
DPNAPKRPPS AFFLFCSEYR PKIKGEHPGL
SIGDVAKKLG EMWNNTAADD KQPYEKKAAC
LKEKYEKDIA AYRAKGKPA AKKGVVKAEC
SKKKKEEEDD EDEEDEEEEE EEEDEDEEEE
DDDDE
  
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**Fig. 1.** Disulfide-HMGB1 sequence



**Fig. 2.** SDS-PAGE with Coomassie Blue staining



**Fig. 3.** Disulfide-HMGB1 induces cytokine production. Mouse macrophages were exposed to 10  $\mu$ g/ml HMGB1 for 24 hours at 37°C, and the levels of IL-6 were measured by ELISA relative to unexposed macrophages.