# **HMGBiotech**

Services and products related to HMGB1 a signal for tissue damage and regeneration



## Disulfide-HMGB1, LPS-free

**Batch concentration:** \*\*\*\*\*\* mg/mL after addition of

\*\*\*\*\* µL 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

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. Disulfide-HMGB1 is lyophilized from 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:**

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

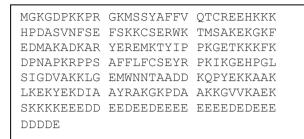


Fig. 1. Disulfide-HMGB1 sequence

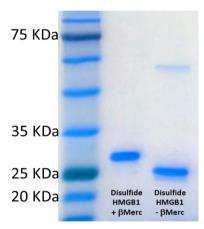
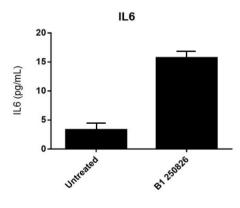


Fig. 2. SDS-PAGE with Coomassie Blue staining



**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.