



Disulfide-HMGB1, LPS-free

Product Number: -----
Expiration date: -----
Batch number: -----
Batch concentration: ----- mg/mL after addition of
----- μ 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. It contains only trace amounts of LPS (<0.1 EU/mL), and is tested for the ability to stimulate cytokine production in mouse macrophages.

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:

- Venereau *et al* (2012) Mutually exclusive redox forms of HMGB1 promote cell recruitment or proinflammatory cytokine release J Exp Med. 209: 1519–1528.
- Wang *et al* (1999) HMG-1 as a late mediator of endotoxin lethality in mice. Science 285:248-51
- Andersson *et al* (2000) High mobility group 1 protein (HMG-1) stimulates proinflammatory cytokine synthesis in human monocytes. J Exp Med 192:565-70
- Scaffidi *et al* (2002) Release of chromatin protein HMGB1 by necrotic cells triggers inflammation. Nature 418: 191-195
- Yang *et al* (2012) Redox modification of cysteine residues regulates the cytokine activity of HMGB1. Mol Med 222: 451-457

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MGKGDPPKPR  GKMSYAFFV  QTCREEHKKK
HPDASVNFSE  FSKKCSERWK  TMSAKEKGF
EDMAKADKAR  YEREMKTYIP  PKGETKFKFK
DPNAPKRPPS  AFFLFCSEYR  PKIKGEHPGL
SIGDVAKKLG  EMWNTAADD  KQPYEKKA
LKEKYEKDIA  AYRAKGKPD  AKKGVVKA
SKKKKEEEDD  EEDEEDEEEE  EEEDEDEEEE
DDDDE
    
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Fig. 1. Disulfide-HMGB1 sequence

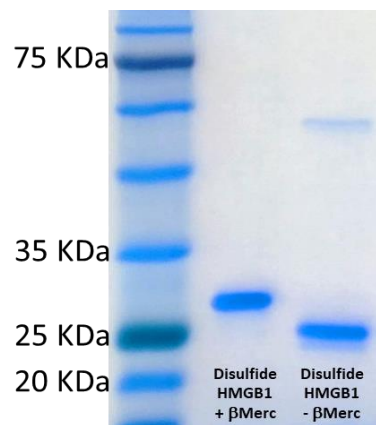


Fig. 2. SDS-PAGE with Coomassie Blue staining

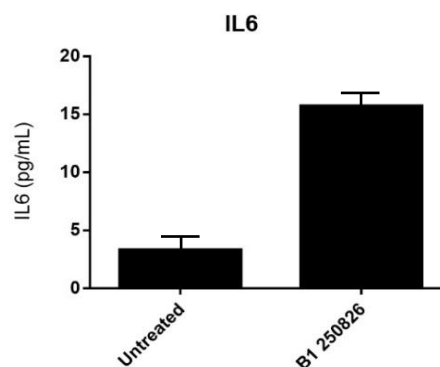


Fig. 3. Disulfide-HMGB1 induces cytokine production. Mouse macrophages were exposed to 10 μ g/ml HMGB1 for 24 hours at 37°C, and the levels of IL-6 were measured by ELISA relative to unexposed macrophages.