

Synonym

HMGB1,HMG1,HMG3,SBP-1

Source

Mouse HMGB1, His Tag (HM1-M52H6) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Glu 215 (Accession # P63158-1).
Predicted N-terminus: Met 1

Molecular Characterization

HMGB1(Met 1 - Glu 215)
P63158-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 26.8 kDa. The protein migrates as 33 kDa and 35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

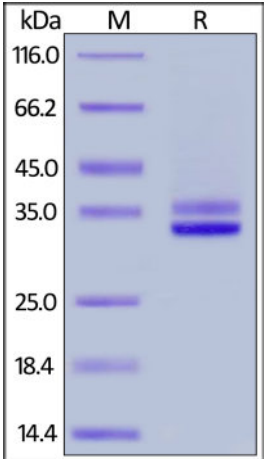
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse HMGB1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Background

High-mobility group protein B1 (HMGB1) is also known as high-mobility group protein 1 (HMG-1) and amphoterin, is a member of the HMGB family consisting of three members, HMGB1, HMGB2 and HMGB3. HMGB1 is a non-histone architectural chromosomal protein ubiquitously present in all vertebrate nuclei and binds double-stranded DNA without sequence specificity. The mechanism of inflammation and damage is binding to TLR4, which mediates HMGB1-dependent activation of macrophage cytokine release. This positions HMGB1 at the intersection of sterile and infectious inflammatory responses. HMGB1 has been studied as a DNA vaccine adjuvant and a target for cancer therapy.

References

(1) [Wang H, et al., 1999, Science 285 \(5425\): 248–51.](#)
(2) [Yang H, et al., 2010, Proc. Natl. Acad. Sci. U.S.A. 107 \(26\): 11942–7.](#)
(3) [Yang H, et al., 2010, Biochim. Biophys. Acta 1799 \(1-2\): 149–56.](#)
(4) [Fagone P, et al., 2011, Gene Ther. 18 \(11\): 1070–7.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.