

Human recombinant HMGB1 (High mobility group box 1) protein, AF

Catalog Number: PROTP09429-3

Overview

Product Name	Human recombinant HMGB1 (High mobility group box 1) protein, AF
Description	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 aa C-terminal region that contains only Asp and Glu. Post-translational modification on HMGB1 have been reported, affect its localization, receptor interactions, and function. HMGB1, with a disulfide bond between C23 and C45, that cause cytokine production and the activation of NF-kappaB. Otherwise, the fully oxidized form has no immune function, losing its proinflammatory effect and the apoptotic cell death activation function.
Size	5ug,20ug,100ug
Tag	His Tag (C-term)
Form	Lyophilized
Source	Escherichia coli
Formulation	The protein was lyophilized from a 0.2 um filtered solution containing 1X PBS, pH 8.0. If you have any concerns or special requirements, please confirm with us.

Storage

Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°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.

Purity

>98% as determined by SDS-PAGE.

Molecular weight

The protein has a calculated MW of 25.70 kDa. The protein migrates as 25-35 kDa under reducing condition (SDS-PAGE analysis).

Activity

Measure by its ability to induce TNF alpha in RAW264.7 cells. The ED₅₀ for this effect is <10 ug/mL.

Endotoxin

<0.1 EU per 1 ug of the protein by the LAL method.

Amino Acid Sequence

MGKGDPPKKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKTMSAKEKGKFEDMAKADKARYEREMKTYIPPKGETKKKFKDPNAPK
RPPSAFFLFCSEYRPKIKGEHPGLSIGDVAKKLGEWNNNTAADDKQPYEKKAALKKEYEKDIAAYRAKGKPDAAKKGVVKAESKKKKEEEEDEEDE
EEEEEEEEDEDEDEEDDDDE with polyhistidine tag at the C-terminus.

Reconstitution

Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H₂O to a concentration not less than 100 ug/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.

Usage

Boster's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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