Recombinant Human, HMGB1 / High Mobility Group Box 1, Animal Free & Carrier Free

Cat #: C-CYP389

Size: 5μg, 20μg, 100μg, 500μg, 1mg

Shipping: Blue Ice

Product Overview

HMGB1 is present in the nuclei(chromatin associated) and cytoplasm of all cells and is a highly conserved protein in variety of species that. In the cytoplasm, HMGB1 is a regulator of autophagy, enhances cell survival, and limits apoptosis. It also can reduces protein aggregation caused by heat or chemical stress. HMGB1 is released to the extracellular milieu by inflammatory cells and by necrotic and apoptotic cells. Once released , it works as an inflammatory cytokine.HMGB1 is also secreted by macrophages and monocytes as a late response to LPS, TNF-α, IL-1β, or IFN-γ.

Product Information

Source: *HEK293*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

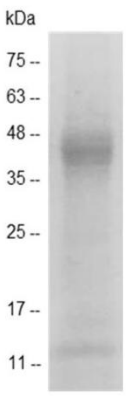
Biological Activity: Measure by its ability to induce TNF alpha in RAW264.7 cells.The ED50 for this effect is <10 μg/mL.

Endotoxin: <0.1EU per 1μg of the protein by the LAL method.

Amino acid sequence:

MGKGDPKKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKTMSAKEKGKFEDMAKADKARYEREMKTYIPPKGETKKKF KDPNAPKRPPSAFFLFCSEYRPKIKGEHPGLSIGDVAKKLGEMWNNTAADDKQPYEKKAAKLKEKYEKDIAAYRAKGKPDAAKKGVVKAEK SKKKKEEEEDEEDEEDEEEEEDEEDEDEEEDDDDE with polyhistidine SUMO tag at the N- terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 7.4.



SDS-PAGE analysis of recombinant human HMGB1

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.

2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H_2O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.

3. The reconstituted solution can be stored at 2-8°C for up to 1 week.

4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 μg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.