HMGB1/HMG-1/HMG1/HMG3/SBP-1, Human, Recombinant

Cat. No. : PCK271

General Information

Synonyms	HMG-1;HMG1;HMG3;SBP-1
Species	Human
Expression host	E.coli
Sequence	MGKGDPKKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKTMSAKEKGKFED MAKADKARYEREMKTYIPPKGETKKKFKDPNAPKRPPSAFFLFCSEYRPKIKGEHPGLSIGDVA KKLGEMWNNTAADDKQPYEKKAAKLKEKYEKDIAAYRAKGKPDAAKKGVVKAEKSKKKKEEEE DEEDEEDEEEEEDEEDEDEEEDDDDE with polyhistidine tag at the terminus.
Accession	P09429.3
Tag	His-tag at the C-terminus
Mol mass	25.70 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce TNF alpha in RAW264.7 cells. The ED50 for this effect is < 10 μg/mL.

Product feature

Purity	> 98% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°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 -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

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.

SDS-PAGE