Datasheet for ABIN2115444

HMGB1 Protein (AA 2-89)

Go to Product page

Overview

Quantity:	50 µg
Target:	HMGB1
Protein Characteristics:	AA 2-89
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human High Mobility Group Protein B1/HMGB1
Sequence:	GKGDPKKPRG KMSSYAFFVQ TCREEHKKKH PDASVNFSEF SKKCSERWKT MSAKEKGKFE DMAKADKARY EREMKTYIPP KGETKKKF
Characteristics:	Recombinant Human High Mobility Group Protein B1/HMGB1/BOXA is produced by our E. coli expression system. The target protein is expressed with sequence (G2-F89) of Human HMBG1.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test

Target Details

Target:	HMGB1
Alternative Name:	High Mobility Group Protein B1/HMGB1 (HMGB1 Products)

Target Details

Background:	HMGB1 belongs to the HMGB family and contains 2 HMG box DNA-binding domains. HMGB1 is a DNA binding proteins that associates with chromatin and has the ability to bend DNA. This nuclear protein organizes the DNA and regulates transcription. After binding HMGB1 bends the DNA, which conducts to the binding of other proteins. HMGB1 suports transcription of many genes in interactions with many transcription factors or cooperation nucleosoms looses packed DNA and increases the chromatin remodeling, contact with core histones changes the structure of nucleosoms. it involved in V(D)J recombination by acting as a cofactor of the RAG complex. The presence of HMGB1 in the nucleus depends on posttranslational modifications. When the protein is not acetylated, stays in the nucleus, but hyperacetylation on lysine residues occurs to translocation into the cytosol. Synonyms: High-mobility group protein B1, high-mobility group protein 1, HMG-1, amphoterin and HMGB1.
Molecular Weight:	10.5 kDa
UniProt:	P09429
Pathways:	p53 Signaling, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development, Positive Regulation of Endopeptidase Activity, Regulation of Carbohydrate Metabolic Process, Toll-Like Receptors Cascades, Smooth Muscle Cell Migration, Inflammasome

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	It is not recommended to reconstitute to a concentration less than 100 µg/mL. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Buffer:	Lyophilized from a 0.2 µm filtered solution of 50 mMHepes,500 mMNaCl,0.5 mMDTT, pH 7.9 .
Preservative:	Dithiothreitol (DTT)
Precaution of Use:	This product contains Dithiothreitol (DTT): a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Storage:	4 °C/-20 °C/-80 °C

Handling

Storage Comment:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.