

Recombinant Human High-mobility Group Box 1, His-tagged

Cat. No. HMGB1-1984H **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant human HMGB1(a.a. 223) fused to His-Tag is produced in *Sf9* insect cells, 25 kDa.

Species Human

Source Sf9 Cells

Description

HMGB1 is an abundant chromatin-binding protein found in eukaryotic cell nucleus and acts in the assembly of nucleoprotein complexes. Inside the cell, HMGB1 binds to DNA and is involved in transcriptional regulation. Outside the cell, HMGB1 acts as a cytokine with activities that resemble those of tumor necrosis factor (TNF). HMGB1 is elevated significantly in chronic kidney disease patients and correlates with glomerular filtration rate as well as with markers of inflammation and malnutrition. HMGB1 is involved in Gram-negative sepsis by catalyzing movement of LPS monomers from LPS aggregates to CD14 to initiate a TLR4-mediated proinflammatory response. HMGB1 plays an important role in the relationship between necrosis and malignancy in glioma tumours.

Amino Acid Sequence

MGKGDPKKPR GKMSYAFFV QTCREEHKKK HPDASVNFSE FSKKCSERWK
 TMSAKEKGKF EDMAKADKAR YEREMKTYIP PKGETKKKFK DPNAPKRPPS
 AFFLFCSEYR PKIKGEHPGL SIGDVAKKLG EMWNNTAADD KQPYEKKA
 LKEKYEKDIA AYRAKGKPPA AKKGVVKA EK SKKKKEEEED EDEEDEEEEE
 EDEEDEEEEE DDDDELEHHH HHH.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Physical Appearance	Sterile Filtered colorless solution.
Purity	Greater than 90% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Formulation	The HMG1 solution (1mg/ml) contains 20mM Tris pH-8, 1mM EDTA, 0.5mM DTT and 10% glycerol.
Storage	HMG1 although stable 14°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Pathways	Base excision repair

GENE INFORMATION

Gene Name	HMGB1 high-mobility group box 1 [Homo sapiens]
Synonyms	HMGB1; high-mobility group box 1; HMG1; HMG3; SBP-1; DKFZp686A04236; Sulfoglucuronyl carbohydrate binding protein; Amphoterin; high mobility group protein 1; High mobility group protein B1; High mobility group protein 1; HMG-1; DKFZp686A04236; OTTHUMP00000190860; OTTHUMP00000018199; high-mobility group (nonhistone chromosomal) protein 1
Gene ID	3146
mRNA Refseq	NM_002128
Protein Refseq	NP_002119
MIM	163905

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



UniProt ID	P09429
Chromosome Location	13q12
Function	DNA bending activity; transcription factor binding

PDB rendering based on 1aab

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA