Active Recombinant Human HMGB1, His-tagged

Cat. No. HMGB1-8460H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HMGB1, fused with His tag, was expressed in E. coli.
Species	Human
Source	E.coli
Description	High mobility group 1 (HMG1) is a 26 kDa highly conserved non-sequence-specific DNA-binding nuclear protein. Mammalian HMG1 has two homologous DNA-binding domains HMG boxes, A and B (each of 80–90 amino-acid residues), linked by a short basic region to an acidic C-terminal domain containing 30 consecutive Asp and Glu residues. HMG1 has been implicated in a number of fundamental biological processes including transcription, replication and recombination, in which it plays a role in manipulating DNA structure by bending, looping, compaction or unwinding, or by direct contacts with distinct cellular proteins. HMG-1 can act as a repressor, by interacting with TBP to block pre-initiation complex formation or as an activator, by facilitating the binding of various transcription factors to their cognate DNA sequences. Most recently, it was discovered that HMG-1 is a late mediator of delayed endotoxin lethality by activating downstream cytokine release.
Form	20 mM Tris-Cl, pH 7.9, 20% Glycerol, 100 mM KCl, 1 mM DTT and 0.2 mM EDTA
Bio-activity	1 unit equals 1 ng of purified protein. 1 unit is the amount sufficient for a gel mobility shift assay in a 20 µl reaction to super-shift TBP-DNA complex, 20 units are sufficient for reconstituted transcription assay and 100 units are sufficient for a protein-protein

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

	interaction assay.
Purity	>95% as determined by SDS-PAGE
Storage	-80 °C
Concentration	500 μg/ml
Shipping	Dry Ice

GENE INFORMATION

Gene Name	HMGB1 high mobility group box 1 [Homo sapiens]
Official Symbol	HMGB1
Synonyms	HMGB1; high mobility group box 1; high mobility group (nonhistone chromosomal) protein 1 , high mobility group box 1 , HMG1; high mobility group protein B1; Amphoterin; DKFZp686A04236; high mobility group protein 1; HMG3; SBP 1; Sulfoglucuronyl carbohydrate binding protein; HMG-1; high-mobility group box 1; high-mobility group (nonhistone chromosomal) protein 1; HMG1; SBP-1;
Gene ID	3146
mRNA Refseq	NM_002128
Protein Refseq	NP_002119
MIM	163905
UniProt ID	P09429

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Chromosome Location	13q12
Pathway	Activated TLR4 signalling, organism-specific biosystem; Activation of DNA fragmentation factor, organism-specific biosystem; Advanced glycosylation endproduct receptor signaling, organism-specific biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; Apoptosis, organism-specific biosystem; Apoptosis induced DNA fragmentation, organism-specific biosystem; Apoptotic executionphase, organism-specific biosystem;
Function	DNA binding; DNA binding, bending; DNA binding, bending; RAGE receptor binding; calcium-dependent protein kinase regulator activity; chemoattractant activity; cytokine activity; cytokine activity; damaged DNA binding; double-stranded DNA binding; protein binding; protein kinase activator activity; repressing transcription factor binding; sequence-specific DNA binding transcription factor activity; single-stranded DNA binding; transcription factor binding;

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