

Recombinant Rat Hmgb1, His-tagged

Cat. No. Hmgb1-292R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Rat HMGB1 (aa 24-215) is fused at the N-terminus to a His-tag.
Species	Rat
Source	E.coli
ProteinLength	24-215 a.a.
Description	HMGB1 was originally discovered as an essential DNA-binding protein for regulating p53, NF-κB and other important proteins. It is secreted from activated dendritic cells, macrophage and necrotic cells, and acts as a ligand for RAGE, TLR-2 and TLR-4 expressed on surrounding cells. As a result, HMGB1 activates Rac, CDC42 and NF-κB inducing localized innate immunity of damaged tissue, tissue regeneration by recruitment of stem cells and hemostasis by induction of tissue factor expression. HMGB1 is also causative agent of various diseases as it causes localized inflammation such as arteriosclerosis, chronic rheumatoid arthritis and nephritis.
Form	Lyophilized from a concentrated sterile solution containing 50mM Tris-HCl buffer (pH 8.0) and 100mM NaCl.
Purity	≥90% (SDS-PAGE)
Stability	Stable for at least 1 year after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.

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Storage Short Term Storage: +4°C; Long Term Storage: -20°C. Avoid freeze/thaw cycles.

GENE INFORMATION

Gene Name Hmgb1 high mobility group box 1 [*Rattus norvegicus*]

Official Symbol Hmgb1

Synonyms HMGB1; high mobility group box 1; high mobility group protein B1; HMG-1; amphoterin; high mobility group 1; heparin-binding protein p30; high mobility group protein 1; Hmg1; Ac2-008; MGC93598; MGC93599;

Gene ID 25459

mRNA Refseq NM_012963

Protein Refseq NP_037095

Pathway Androgen Receptor Signaling Pathway, organism-specific biosystem; Base excision repair, organism-specific biosystem; Base excision repair, conserved biosystem;

Function 5S rRNA binding; DNA binding, bending; DNA binding, bending; RAGE receptor binding; RAGE receptor binding; bent DNA binding; calcium-dependent protein kinase regulator activity; crossed form four-way junction DNA binding; cytokine activity; cytokine activity; double-stranded DNA binding; four-way junction DNA binding; glycolipid binding; heparin binding; heparin binding; open form four-way junction DNA binding; peptide binding; protein binding; protein dimerization activity; protein kinase activator activity; repressing transcription factor binding; sequence-specific DNA binding transcription factor activity; single-stranded DNA binding; transcription factor binding; transcription factor binding;

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