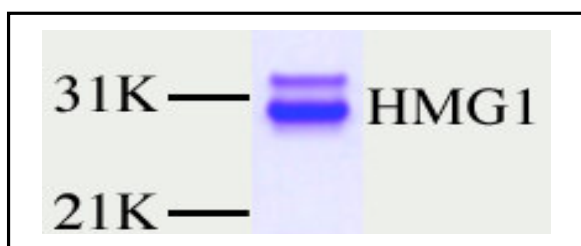


HMG1

High Mobility Group 1

human, recombinant, *E. coli*

Cat. No.	Amount
PR-724	10 µg



For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.

Activity

1 ng is sufficient for a gel mobility shift assay in a 20 µl reaction to super-shift TBP-DNA complex, 20 ng are sufficient for reconstituted transcription assays and 100 ng are sufficient for a protein-protein interaction assay.

Application

HMG1 has been applied in *in vitro* transcription assays, DNA-protein and protein-protein interactions assays.

Molecular Weight

30 kDa

Purity

> 95% by SDS-PAGE

Description

High mobility group 1 (HMG1) is a 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. HMG1 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.

Recombinant HMG1 is isolated from an *E. coli* strain that carries the coding sequence of the human HMG1 under the control of a T7 promoter.

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