

High Mobility Group Protein 1 (HMGB1) Active Protein | HMGB1 active protein

Active High Mobility Group Protein 1 (HMGB1)

CATALOG # AAA149232	HOST Host: E Coli Source: Prokaryotic Expression	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	--	---

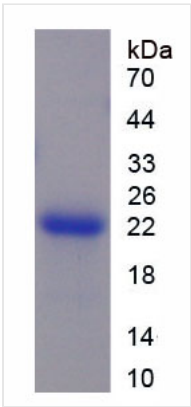
PRODUCT SYNONYMS

High Mobility Group Protein 1 (HMGB1); Active High Mobility Group Protein 1 (HMGB1); HMG1; HMG3; SBP1; Sulfoglucuronyl Carbohydrate Binding Protein; Amphoterin; High Mobility Group Box 1 Protein; HMGB1 active protein

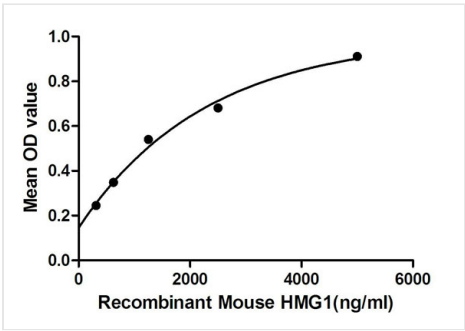
PRODUCT SPECIFICATIONS

Host	Host: E Coli Source: Prokaryotic Expression
Purity/Purification	> 90%
Form/Format	Freeze-Dried Powder; 20mM Tris, 150mM NaCl, pH8.0, Containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Pro9~Arg163
Sequence Length	215
Applicable Applications for HMGB1 active protein	Activity Assay, Cell Culture
Species	Mouse
Tag	N-terminal His-Tag
Isoelectric Point	9.7
Subcellular Location	Endosome; Nucleus; Extracellular Region or Secreted; Plasma Membrane
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

IMAGES



SDS-PAGE



Activity

High Mobility Group Protein 1 (HMG1) is among the most important chromatin proteins. In the nucleus HMGB1 interacts with nucleosomes, transcription factors, and histones. This nuclear protein organizes the DNA and regulates transcription. Besides, Stromal Cell Derived Factor 1 (SDF1) has been identified as an interactor of HMG1, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse HMG1 and recombinant mouse SDF1. Briefly, HMG1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to SDF1-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-HMG1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of HMG1 and SDF1 was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The binding activity of HMG1 with SDF1.

ADDITIONAL INFORMATION

Product Categories/Family for HMGB1 active protein	Infection immunity
--	--------------------

NCBI AND UNIPROT INFORMATION

NCBI GI #	926657659
NCBI GeneID	15289
NCBI Accession #	NP_001300823.1
NCBI GenBank Nucleotide #	NM_001313894.1
UniProt Accession #	P63158
Molecular Weight	Predicted MW: 21.7kDa Accurate MW: 22kDa
NCBI Official Full Name	high mobility group protein B1
NCBI Official Synonym Full Names	high mobility group box 1
NCBI Official Symbol	Hmgb1
NCBI Official Synonym Symbols	p30; Hmg1; HMG-1; SBP-1
NCBI Protein Information	high mobility group protein B1
UniProt Protein Name	High mobility group protein B1
UniProt Gene Name	Hmgb1
UniProt Synonym Gene Names	Hmg-1; Hmg1; HMG-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

