

HMGB1

Recombinant Human High-Mobility Group Box 1 His

Catalog No.	CSI20149A CSI20149B CSI20149C	Quantity:	10 µg 50 µg 1.0 mg
Alternate Names:	High mobility group protein B1, HMG-1, Amphoterin, high mobility group box 1, high mobility group protein 1, Sulfoglucuronyl carbohydrate binding protein, high-mobility group (nonhistone chromosomal) protein 1		
Description:	Recombinant Human High-mobility group box 1 protein (HMGB1), previously known as HMG-1 or amphoterin, is a member of the high mobility group box family of non-histone chromosomal proteins. Human HMGB1 is expressed as a 30 kDa, 215 amino acid (aa) single chain polypeptide containing three domains: two N-terminal globular, 70 aa positively charged DNA-binding domains (HMG boxes A and B), and a negatively charged 30 aa C-terminal region that contains only Asp and Glu.4, 5 Residues 27 - 43 and 178 - 184 contain a NLS. Posttranslational modifications of the molecule have been reported, with acetylation occurring on as many as 17 lysine residues. HMGB1 is expressed at high levels in almost all cells. It was originally discovered as a nuclear protein that could bend DNA. Such bending stabilizes nucleosome formation and regulates the expression of select genes upon recruitment by DNA binding proteins.		
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.		
Gene ID:	3146		
Source:	<i>E. coli</i>		
Molecular Weight:	Approximately 26.0 kDa, a single non-glycosylated polypeptide chain containing 217 amino acids with 6 × His at C-terminus.		
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.		
Purity:	>95% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	Less than 1EU/µg of rHuHMGB1, His as determined by LAL method.		
Amino Acid Sequence:	MGKGDPKKPR GKMSSYAFFV QTCREEHKKK HPDASVNFSE FSKKCSERWK TMSAKEKGKF EDMAKADKAR YEREMKTYIP PKGETKKKFK DPNAPKRPPS AFFLFCSEYR PKIKGEHPGL SIGDVAKKLG EMWNNTAADD KQPYEKKA LKEKYEKDIA AYRAKGKPD AAKGVVKA EK SKKKKEEEED EDEEDEDEEE EDEEDEDEEE DDDDELE HHH HHH		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/mL. Further dilutions should be made in appropriate buffered solutions. Stock solutions should be apportioned into working aliquots and stored at <-20°C. Further dilutions should be made in appropriate buffered solutions.		
Storage & Stability:	This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2 -4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. Avoid repeated freeze/thaw cycles.		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.