

Recombinant Human High Mobility Group Box-1 Protein, His

Information

Gene ID	3146
Accession #	P09429
Alternate Names	Sentrin-2, SMT3B, SMT3H2
Source	Escherichia coli.
M.Wt	Approximately 26.0 kDa, a single non-glycosylated polypeptide chain containing 223 amino acids with 6 × His at C-terminus.
AA Sequence	MGKGDPPKPR GKMSSYAFFV QTCREEHKKK HPDASVNFSE FSKKCSERWK TMSAKEKGKF EDMAKADKAR YEREMKTYIP PKGETKKKFK DPNAPKRPPS AFFLFCSEYR PKIKGEHPGL SIGDVAKKLG EMWNNTAADD KQPYEKKA AK LKEYEKDIA AYRAKGKPA AKKGVVKA EK SKKKKEEEED EEDEEDEEEE EDEEDEDEEE DDDDELEHHH HHH
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Data not available.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	10μg	100μg	500μg
Recombinant Human High Mobility Group Box-1 Protein, His	10μg	100μg	500μg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control

Purity	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rHuHMGB1, His as determined by LAL method.

Description

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 (a.a.) single chain polypeptide containing three domains: two N-terminal globular, 70 a.a. positively charged DNA-binding domains (HMG boxes A and B), and a negatively charged 30 a.a. C-terminal region that contains only Asp.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.

Reference

1. Abdulahad D, Westra J, Reefman E, et al. 2013. Lupus,
2. Li G, Liang X, Lotze MT. 2013. Front Immunol, 4: 68
3. Tang J, Deng P, Jiang Y, et al. 2013. Cell Biol Int, 37: 262-6
4. Zhang G, Chen F, Cao Y, et al. 2013. J Urol,

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