

Recombinant Human HMGB2 Protein (Gly2-Pro187), His tagged

Cat. No. HMGB2-2739H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human HMGB2 (Gly2-Pro187) protein fused with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Gly2-Pro187
Description	Multifunctional protein with various roles in different cellular compartments. May act in a redox sensitive manner. In the nucleus is an abundant chromatin-associated non-histone protein involved in transcription, chromatin remodeling and V (D) J recombination and probably other processes. Binds DNA with a preference to non-canonical DNA structures such as single-stranded DNA. Can bent DNA and enhance DNA flexibility by looping thus providing a mechanism to promote activities on various gene promoters by enhancing transcription factor binding and/or bringing distant regulatory sequences into close proximity. Involved in V (D) J recombination by acting as a cofactor of the RAG complex: acts by stimulating cleavage and RAG protein binding at the 23 bp spacer of conserved recombination signal sequences (RSS). Proposed to be involved in the innate immune response to nucleic acids by acting as a promiscuous immunogenic DNA/RNA sensor which cooperates with subsequent discriminative sensing by specific pattern recognition receptors. In the extracellular compartment acts as a chemokine. Promotes proliferation and migration of

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endothelial cells implicating AGER/RAGE. Has antimicrobial activity in gastrointestinal epithelial tissues. Involved in inflammatory response to antigenic stimulus coupled with proinflammatory activity Involved in modulation of neurogenesis probably by regulation of neural stem proliferation. Involved in articular cartilage surface maintenance implicating LEF1 and the Wnt/beta-catenin pathway.

Molecular Mass	23.04 kDa
Purity	>90 % as determined by SDS-PAGE.
Notes	For research use only.
Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 centigrade for one week. Store at -20 to -80 centigrade for twelve months from the date of receipt.
Storage Buffer	Supplied as solution form in PBS pH 7.5 or lyophilized from PBS pH 7.5.
Reconstitution	Reconstitute in sterile water for a stock solution.
Shipping	In general, proteins are provided as lyophilized powder/frozen liquid. They are shipped out with dry ice/blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	HMGB2 high mobility group box 2 [Homo sapiens (human)]
Official Symbol	HMGB2
Synonyms	HMGB2; high mobility group box 2; high mobility group (nonhistone chromosomal) protein 2, high mobility group box 2, HMG2; high mobility group protein B2; HMG-2;

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Gene ID

3148

mRNA Refseq

NM_001130688

Protein Refseq

NP_001124160

MIM

163906

UniProt ID

P26583

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