

HMGB1

PRODUCT INFORMATION

Product Number: 326059683

Source: Bovine thymus

Contents: 50 µg HMGB1 protein in 50 µL of 7.5 mM boric acid buffer solution (pH 9.0) containing 200 mM NaCl

Storage: Below -20°C; avoid repeated freeze/thaw cycles.

BACKGROUND

HMGB1 and HMGB2 are chromatin-associated nuclear proteins that play an important role in transcription and DNA recombination. HMG proteins contain a highly acidic C-terminal domain as well as two evolutionarily conserved high mobility group (HMG) box motifs as their N-terminus¹. HMG boxes are found in numerous DNA binding proteins and transcription factors and allow HMG proteins to bind and to bend DNA². Especially, HMGB1 is known as amphoterin, it mediates neurite outgrowth, and it binds receptors for advanced glycation end products (RAGE)³. Recently, HMGB1 was unexpectedly identified as a cytokine through studies of endotoxemia and sepsis⁴.

PURIFICATION METHOD

HMGB1 protein was purified from bovine thymus by acetone extraction and ion-exchange chromatography. The purity of the HMGB1 protein was confirmed by SDS-PAGE analysis.

MOLECULAR WEIGHT

Approximately 25 kDa

CAUTION

For research use only.

Not for diagnostic and therapeutic use.

REFERENCES

1. Bustin M and Reeves R. High-mobility-group chromosomal proteins: architectural components that facilitate chromatin function. *Prog Nucleic Acid Res Mol Biol* 1996; **54**: 35-100.
2. Baxevanis A. D and Landsman D. The HMG-1 box protein family: classification and functional relationships. *Nucleic Acids Res* 1995; **23**: 1604-1613.
3. Hori O *et al.* The receptor for advanced glycation end products (RAGE) is a cellular binding site for amphoterin. *J Biol Chem* 1995; **270**: 25752-25761.
4. Wang H *et al.* HMG-1 as a late mediator of endotoxin lethality in mice. *Science* 1999; **285**: 248-251.

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