# Mouse Anti-HMGB1, 2 Monoclonal Antibody

### **PRODUCT INFORMATION**

Product Number: 326052240

Isotype: Mouse IgG<sub>1</sub>

Contents: 50 µg antibody in 50 µL PBS (pH 7.2)

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-terminus<sup>1)</sup>. HMG boxes are found in numerous DNA binding proteins and transcription factors and allow HMG proteins to bind and to bend DNA<sup>2)</sup>. Especially, HMGB1 is known as amphoterin, it mediates neurite outgrowth, and it binds receptors for advanced glycation end products (RAGE)<sup>3)</sup>. Recently, HMGB1 was unexpectedly identified as a cytokine through studies of endotoxemia and sepsis<sup>4)</sup>.

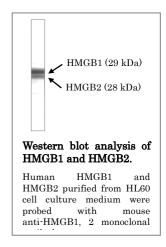
#### SPECIFICITY AND PREPARATION

The antibody recognizes human, rabbit, bovine, pig, rat, and mouse HMGB1 and HMGB2. The specificity of the antibody was confirmed by western blot analysis. A hybridoma of the antibody was established by fusion of mouse myeloma cell P3U1 and BALB/c mouse spleen cell immunized with recombinant human HMGB1. This antibody was purified from the cell culture medium using Protein A Sepharose.

#### USAGE CAUTION

Western blotting: 1-2 µg/mL 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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