

Chicken Anti-HMGB1 Polyclonal Antibody

PRODUCT INFORMATION

Product Number: 326052233
Isotype: Chicken IgY fraction
Contents: 1 mg antibody in 1 mL 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-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.

SPECIFICITY AND PREPARATION

The antibody recognizes human, rabbit, bovine, pig, rat, and mouse HMGB1, and also recognizes HMGB2 slightly. The specificity of the antibody was confirmed by western blot analysis. Purified pig thymus HMGB1 was used as an immunogen. The antibody was purified from egg yolk by salt precipitation.

USAGE

Western blotting: 2-3 µg/mL
Neutralizing antibody: 2mg/kg/mouse⁵

CAUTION

For research use only.
Not for diagnostic and therapeutic use.
Endotoxin is not removed from this antibody.

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.
5. Abeyama K *et al.* The N-terminal domain of thrombomodulin sequesters high-mobility group-B1 protein, a novel antiinflammatory mechanism. *J Clin Invest* 2005; **115**: 1267-74.
6. Ueno H *et al.* Contributions of High Mobility Group Box Protein in Experimental and Clinical Acute Lung Injury. *Am J Respir Crit Care Med* 2004; **170**: 1310-1316.

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