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-terminus\(^1\). HMG boxes are found in numerous DNA binding proteins and transcription factors and allow HMG proteins to bind and to bend DNA\(^2\). 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 sepsis\(^4\).

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/mouse\(^5\)

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

APPLICATION\(^6\)
Illustrative histologic samples in control, LPS-instilled, and anti-HMGB1 antibody + LPS-instilled mice (antibody). Note the mitigation of lung injury by the anti-HMGB1 treatment, whereas some neutrophil infiltration into the air spaces persisted. n = 10 in each group. Hematoxylin and eosin staining. Original magnification ×400.
REFERENCES