

## Data Sheet

# Anti-HMG-1 Antibody, Mouse Monoclonal

Clone HAP46.5, purified from hybridoma cell culture

**H9537**

## Product Description

Monoclonal Anti-HMG-1 (mouse IgG1 isotype) is derived from the HAP46.5 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mouse immunized with purified human recombinant HMG-1. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Cat. No. ISO2.

Monoclonal Anti-HMG-1 recognizes human, canine, mouse, rat, and chicken HMG-1. The antibody may be used in various immunochemical applications including ELISA and Immunoblotting (approx. 25 kDa).

HMG-1 (High-Mobility-Group protein, amphoterin) is a highly conserved protein with more than 95% amino acid identity between rodent and human HMG-1. It is a prevalent non-histone chromatin component and a non-sequence specific DNA binding protein. HMG-1 consists of two homologous HMG boxes rich in basic amino acids and an acidic tail at the carboxy-terminus.<sup>1-8</sup>

HMG-1 is involved in the regulation of chromatin structure as well as being involved, either as positive or negative factors with various aspects of DNA replication, transcription, repair, and ligation.<sup>1-4</sup> HMG-1, identified as a membrane associated protein termed "amphoterin," mediates neurite outgrowth,<sup>5</sup> tumor outgrowth, and metastasis.<sup>6</sup> It participates in plasminogen activation<sup>7</sup> and is recognized as a late mediator of endotoxin lethality in mice.<sup>8</sup>

Monoclonal antibodies specific for HMG-1 are an essential tool for studying the biology of transcription.

## Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Antibody Concentration: ~1.5 mg/mL

## Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

## Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

## Product Profile

Immunoblotting, a working antibody concentration of 0.5-1 µg/mL is recommended using a total cell extract of human MCF breast carcinoma cells.

**Note:** In order to obtain the best results in various techniques and preparations, we recommend determining optimal working dilutions by titration.

## References

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