**BACKGROUND**

High mobility group (HMG) proteins 1 and 2 are ubiquitous non-histone components of chromatin. Research suggests that the binding of HMG proteins to DNA induces alterations in the DNA architecture, including DNA bending and unwinding of the helix. HMG proteins synergize with Oct-2, ATF-2, c-Jun and members of the NFκB family to activate transcription. Additional studies indicate that phosphorylation of HMG protein is required to stimulate the transcriptional activity of the protein. Human HMG-1 and HMG-2 each contain two DNA-binding domains, termed HMG boxes. HMG proteins bind single-stranded DNA but induce conformational changes in double-stranded DNA alone.

**CHROMOSOMAL LOCATION**

Genetic locus: HMBG1 (human) mapping to 13q12.3; Hmgb1 (mouse) mapping to 5 G3.

**SOURCE**

HMG-1 (HAP46.5) is a mouse monoclonal antibody raised against full length HMG-1 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

HMG-1 (HAP46.5) is recommended for detection of HMG-1 of mouse, rat, human and avian origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.