

HMG-2 (D-16): sc-26349

BACKGROUND

High mobility group (HMG) proteins 1 and 2 are ubiquitous non-histone components of chromatin. Evidence 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, members of the NF κ B family, ATF-2 and c-Jun to activate transcription. Other studies indicate that phosphorylation of HMG protein is required to stimulate the transcriptional activity of the protein. Human HMG-1 and HMG-2 both contain two DNA-binding domains, termed HMG boxes. HMG proteins bind single-stranded DNA but induce conformational changes in double-stranded DNA alone.

REFERENCES

1. Wen, L., Huang, J.K., Johnson, B.H. and Reeck, G.R. 1989. A human placental cDNA clone that encodes nonhistone chromosomal protein HMG-1. *Nucleic Acids Res.* 17: 1197-1214.
2. Bustin, M., Lehn, D. A. and Landsman, D. 1990. Structural features of the HMG chromosomal proteins and their genes. *Biochim. Biophys. Acta* 1049: 231-243.
3. Shirakawa, H. and Yoshida, M. 1992. Structure of a gene coding for human HMG-2 protein. *J. Biol. Chem.* 267: 6641-6635.

SOURCE

HMG-2 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HMG-2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-26349 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-26349 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HMG-2 (D-16) is recommended for detection of HMG-2, LOC646993 and LOC441795 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HMG-2 (D-16) is also recommended for detection of HMG-2, LOC646993 and LOC441795 in additional species, including equine, canine, bovine, porcine and avian.

HMG-2 (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

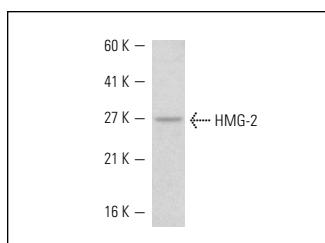
Molecular Weight of HMG-2: 26 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, K-562 whole cell lysate: sc-2203 or K-562 nuclear extract: sc-2130.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



HMG-2 (D-16): sc-26349. Western blot analysis of HMG-2 expression in HeLa nuclear extract.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **HMG-2 (D-3): sc-271689** or **HMG-2 (68.32): sc-101067**, our highly recommended monoclonal alternatives to HMG-2 (D-16).