

HMG-2L1 (D-1): sc-166828

BACKGROUND

High mobility group (HMG) protein 1 and 2 have been classified by DNA binding preferences and are ubiquitous non-histone components of chromatin. They bind to the minor groove of AT-rich DNA sequences with high affinity. 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 NFκB family, ATF-2 and c-Jun to activate transcription. HMG-2L1 (high mobility group protein 2-like 1), also known as HMGB1, is a member of the HMG chromosomal protein superfamily. It contains a single HMG box DNA binding domain and therefore does not contain an acidic C-terminal tail. HMG-2L1 is expressed in the nucleus and may play a role in transcriptional regulation.

REFERENCES

1. 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.
2. Laudet, V., Stehelin, D. and Clevers, H. 1993. Ancestry and diversity of the HMG box superfamily. *Nucleic Acids Res.* 21: 2493-2501.
3. Nissen, M.S. and Reeves, R. 1995. Changes in superhelicity are introduced into closed circular DNA by binding of high mobility group protein I/Y. *J. Biol. Chem.* 270: 4355-4360.
4. Bustin, M. 1999. Regulation of DNA-dependent activities by the functional motifs of the high-mobility-group chromosomal proteins. *Mol. Cell. Biol.* 19: 5237-5246.
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CHROMOSOMAL LOCATION

Genetic locus: HMGXB4 (human) mapping to 22q12.3; Hmgxb4 (mouse) mapping to 8 C1.

SOURCE

HMG-2L1 (D-1) is a mouse monoclonal antibody raised against amino acids 409-587 mapping near the C-terminus of HMG-2L1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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-166828 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

HMG-2L1 (D-1) is recommended for detection of HMG-2L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for HMG-2L1 siRNA (h): sc-75266, HMG-2L1 siRNA (m): sc-146048, HMG-2L1 shRNA Plasmid (h): sc-75266-SH, HMG-2L1 shRNA Plasmid (m): sc-146048-SH, HMG-2L1 shRNA (h) Lentiviral Particles: sc-75266-V and HMG-2L1 shRNA (m) Lentiviral Particles: sc-146048-V.

HMG-2L1 (D-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

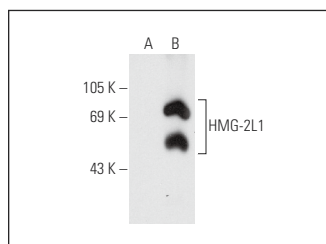
Molecular Weight of HMG-2L1: 77 kDa.

Positive Controls: c4 whole cell lysate: sc-364186 or HMG-2L1 (m2): 293T Lysate: sc-120835.

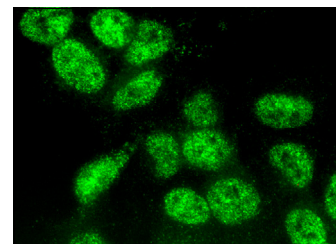
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



HMG-2L1 (D-1): sc-166828. Western blot analysis of HMG-2L1 expression in non-transfected: sc-117752 (A) and mouse HMG-2L1 transfected: sc-120835 (B) 293T whole cell lysates.



HMG-2L1 (D-1): sc-166828. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

RESEARCH USE

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

PROTOCOLS

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