

# HMG-2L1 (2420C1a): sc-81098

## 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 NF $\kappa$ B family, ATF-2 and c-Jun to activate transcription. HMG-2L1 (high mobility group protein 2-like 1), also known as HMGBCG, 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.
5. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2000. John Hopkins University, Baltimore, MD. MIM Number: 604702. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Liu, F., Chau, K.Y., Arlotta, P. and Ono, S.J. 2001. The HMG I proteins: dynamic roles in gene activation, development, and tumorigenesis. *Immunol. Res.* 24: 13-29.

## CHROMOSOMAL LOCATION

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

## SOURCE

HMG-2L1 (2420C1a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the N-terminal region of HMG-2L1 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

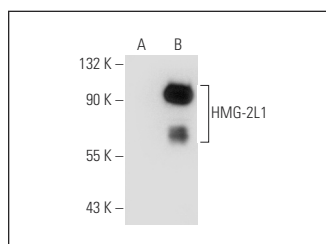
HMG-2L1 (2420C1a) is recommended for detection of HMG-2L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)].

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.

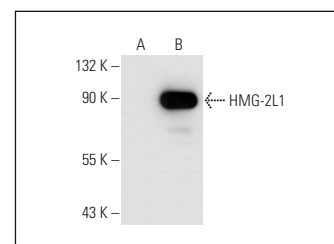
Molecular Weight of HMG-2L1: 77 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, HMG-2L1 (h2): 293T Lysate: sc-128808 or HMG-2L1 (m2): 293T Lysate: sc-120835.

## DATA



HMG-2L1 (2420C1a): sc-81098. 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 (2420C1a): sc-81098. Western blot analysis of HMG-2L1 expression in non-transfected: sc-117752 (A) and human HMG-2L1 transfected: sc-128808 (B) 293T whole cell lysates.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## RESEARCH USE

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