

HMG-2L1 (h2): 293T Lysate: sc-128808

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.
5. Online Mendelian Inheritance in Man, OMIM[™]. 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.
7. Yamada, M., Ohkawara, B., Ichimura, N., Hyodo-Miura, J., Urushiyama, S., Shirakabe, K. and Shibuya, H. 2003. Negative regulation of Wnt signalling by HMG-2L1, a novel NLK-binding protein. *Genes Cells* 8: 677-684.

CHROMOSOMAL LOCATION

Genetic locus: HMGXB4 (human) mapping to 22q12.3.

PRODUCT

HMG-2L1 (h2): 293T Lysate represents a lysate of human HMG-2L1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

HMG-2L1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive HMG-2L1 antibodies. Recommended use: 10-20 µl per lane.

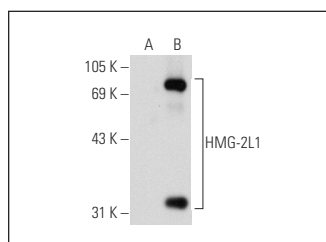
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

HMG-2L1 (D-1): sc-166828 is recommended as a positive control antibody for Western Blot analysis of enhanced human HMG-2L1 expression in HMG-2L1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

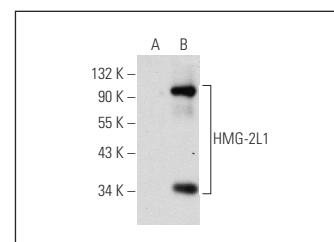
RECOMMENDED SUPPORT REAGENTS

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.

DATA



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



HMG-2L1 (F-10): sc-166797. 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.

PROTOCOLS

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