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JMJD2B (m): 293T Lysate: sc-121157

BACKGROUND

JMJD2B (JmjC domain-containing histone demethylation protein 3A) is a 1,064 amino acid protein encoded by the human gene JMJD2B. JMJD2B belongs to the JMJD2B histone demethylase family and contains one JmjC domain, one JmjN domain, two PHD-type zinc fingers and two Tudor domains. The two Tudor domains recognize and bind methylated histones and have an interdigitated structure; the unusual fold is required for its ability to bind methylated histone tails. JMJD2B is a histone demethylase that specifically demethylates Lys 9 residues of Histone H3, thereby playing a role in histone code. It does not demethylate Histone H3 Lys 4, H3 Lys 27, H3 Lys 36 or H4 Lys 20, however, and is only able to demethylate trimethylated H3 Lys 9 and has weaker activity than JMJD2A, JMJD2C and JMJD2D. JMJD2B demethylation of lysine residues will generate formaldehyde and succinate. JMJD2B is a ubiquitously expressed nuclear protein.

REFERENCES

1. Katoh, M. and Katoh, M. 2004. Identification and characterization of JMJD2 family genes in silico. *Int. J. Oncol.* 24: 1623-1628.
2. Zhang, D., Yoon, H.G. and Wong, J. 2005. JMJD is a novel N-CoR-interacting protein and is involved in repression of the human transcription factor achaete scute-like homologue 2 (ASCL2/Hash2). *Mol. Cell. Biol.* 25: 6404-6414.
3. Gray, S.G., Iglesias, A.H., Lizcano, F., Villanueva, R., Camelo, S., Jingu, H., Teh, B.T., Koibuchi, N., Chin, W.W., Kokkotou, E. and Dangond, F. 2005. Functional characterization of JMJD2A, a histone deacetylase- and retinoblastoma-binding protein. *J. Biol. Chem.* 280: 28507-28518.
4. Whetstine, J.R., Nottke, A., Lan, F., Huarte, M., Smolikov, S., Chen, Z., Spooner, E., Li, E., Zhang, G., Colaiacovo, M. and Shi, Y. 2006. Reversal of histone lysine trimethylation by the JMJD2 family of histone demethylases. *Cell* 125: 467-481.
5. Fodor, B.D., Kubicek, S., Yonezawa, M., O'Sullivan, R.J., Sengupta, R., Perez-Burgos, L., Opravil, S., Mechtler, K., Schotta, G. and Jenuwein, T. 2006. JMJD2B antagonizes H3-K9 trimethylation at pericentric heterochromatin in mammalian cells. *Genes Dev.* 20: 1557-1562.
6. Katoh, Y. and Katoh, M. 2007. Comparative integromics on JMJD2A, JMJD2B and JMJD2C: preferential expression of JMJD2C in undifferentiated ES cells. *Int. J. Mol. Med.* 20: 269-273.
7. Adamsen, B.L., Kravik, K.L., Clausen, O.P. and De Angelis, P.M. 2007. Apoptosis, cell cycle progression and gene expression in TP53-depleted HCT116 colon cancer cells in response to short-term 5-fluorouracil treatment. *Int. J. Oncol.* 31: 1491-1500.

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.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Jmjd2b (mouse) mapping to 17 D.

PRODUCT

JMJD2B (m): 293T Lysate represents a lysate of mouse JMJD2B transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

JMJD2B (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive JMJD2B antibodies. Recommended use: 10-20 µl per lane.

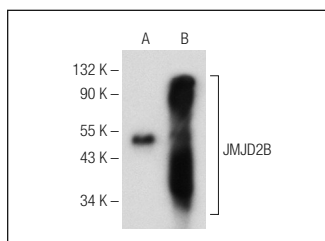
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

JMJD2B (F-12): sc-374241 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse JMJD2B expression in JMJD2B 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



JMJD2B (F-12): sc-374241. Western blot analysis of JMJD2B expression in non-transfected: sc-117752 (A) and mouse JMJD2B transfected: sc-121157 (B) 293T whole cell lysates.

RESEARCH USE

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