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PMF-1 (m): 293T Lysate: sc-122657

BACKGROUND

PMF-1 (polyamine-modulated factor 1) is a 205 amino acid protein involved in kinetochore formation. Localized to the nucleus, PMF-1 contains a coiled-coil domain which interacts with the leucine-zipper domain of Nrf2. This interaction regulates the transcription of SSAT, a regulatory enzyme for polyamine catabolism. PMF-1 is also a component of the MIS12 complex, which is required for kinetochore formation and chromosomal alignment and segregation. PMF-1 is expressed at highest levels in skeletal muscle and heart, with moderate expression in liver and kidney. PMF-1 exists as five isoforms produced by alternative splicing.

REFERENCES

1. Wang, Y., Devereux, W., Stewart, T.M. and Casero, R.A. 1999. Cloning and characterization of human polyamine-modulated factor-1, a transcriptional cofactor that regulates the transcription of the spermidine/spermine N¹-acetyltransferase gene. *J. Biol. Chem.* 274: 22095-22101.
2. Wang, Y., Devereux, W., Stewart, T.M. and Casero, R.A. 2001. Characterization of the interaction between the transcription factors human polyamine modulated factor (PMF-1) and NF-E2-related factor 2 (Nrf2) in the transcriptional regulation of the spermidine/spermine N¹-acetyltransferase (SSAT) gene. *Biochem. J.* 355: 45-49.
3. Wang, Y., Devereux, W., Stewart, T.M. and Casero, R.A. 2002. Polyamine-modulated factor 1 binds to the human homologue of the 7a subunit of the *Arabidopsis* COP9 signalosome: implications in gene expression. *Biochem. J.* 366: 79-86.
4. Cheeseman, I.M., Niessen, S., Anderson, S., Hyndman, F., Yates, J.R., Oegema, K. and Desai, A. 2004. A conserved protein network controls assembly of the outer kinetochore and its ability to sustain tension. *Genes Dev.* 18: 2255-2268.
5. Obuse, C., Iwasaki, O., Kiyomitsu, T., Goshima, G., Toyoda, Y. and Yanagida, M. 2004. A conserved MIS12 centromere complex is linked to heterochromatic HP1 and outer kinetochore protein ZWINT 1. *Nat. Cell Biol.* 6: 1135-1141.
6. Kline, S.L., Cheeseman, I.M., Hori, T., Fukagawa, T. and Desai, A. 2006. The human MIS12 complex is required for kinetochore assembly and proper chromosome segregation. *J. Cell Biol.* 173: 9-17.
7. Hyvönen, M.T., Uimari, A., Keinänen, T.A., Heikkinen, S., Pellinen, R., Wahlfors, T., Korhonen, A., Närvänen, A., Wahlfors, J., Alhonen, L. and Jänne, J. 2006. Polyamine-regulated unproductive splicing and translation of spermidine/spermine N¹-acetyltransferase. *RNA* 12: 1569-1582.
8. Online Mendelian Inheritance in Man, OMIM[™]. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 609176. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
9. Aleman, A., Cebrian, V., Alvarez, M., Lopez, V., Orenes, E., Lopez-Serra, L., Algaba, F., Bellmunt, J., López-Beltrán, A., Gonzalez-Peramato, P., Cordon-Cardo, C., García, J., del Muro, J.G., Esteller, M. and Sánchez-Carbayo, M. 2008. Identification of PMF-1 methylation in association with bladder cancer progression. *Clin. Cancer Res.* 14: 8236-8243.

CHROMOSOMAL LOCATION

Genetic locus: Pmf1 (mouse) mapping to 3 F1.

PRODUCT

PMF-1 (m): 293T Lysate represents a lysate of mouse PMF-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PMF-1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PMF-1 antibodies. Recommended use: 10-20 µl per lane.

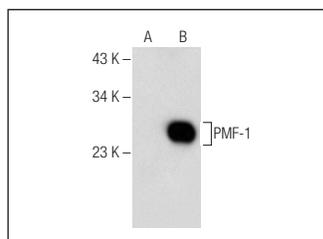
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PMF-1 (B-5): sc-376988 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PMF-1 expression in PMF-1 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



PMF-1 (B-5): sc-376988. Western blot analysis of PMF-1 expression in non-transfected: sc-117752 (A) and mouse PMF-1 transfected: sc-122657 (B) 293T whole cell lysates.

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.

PROTOCOLS

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