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PIWIL2 (h): 293T Lysate: sc-370205

BACKGROUND

PIWIL2 (PIWI-like protein 2), also known as HILI and cancer/testis antigen 80 (CT80), is a 973 amino acid protein that belongs to the argonaute family. PIWIL2 contains one PAZ domain and one PIWI domain. PIWIL2 is a cytoplasmic protein that is expressed in adult testis and in most tumors. It regulates spermatogenesis and primordial germ cell production and has an essential role in meiotic differentiation of spermatocytes and in self-renewal of spermatogonial stem cells. Expression of PIWIL2 can modulate expression of genes involved in stem cell proliferation (such as PDGFR- β), in energy metabolism (such as Glut1), in cell-cell interaction (such as Integrin $\alpha 6$, GJA7, THY-1 and CD9), and in germ cell differentiation (such as STRA8). It may also play a role as a regulatory factor of Stat3/Bcl-x_{S_L}/CCND1 pathway. Repression of PIWIL2 can inhibit tumor cell growth. PIWIL2 acts as an oncogene by inhibition of apoptosis and promotion of proliferation in tumors.

REFERENCES

1. Sasaki, T., Shiohama, A., Minoshima, S. and Shimizu, N. 2003. Identification of eight members of the Argonaute family in the human genome small star, filled. *Genomics* 82: 323-330.
2. Kuramochi-Miyagawa, S., Kimura, T., Ijiri, T.W., Isobe, T., Asada, N., Fujita, Y., Ikawa, M., Iwai, N., Okabe, M., Deng, W., Lin, H., Matsuda, Y. and Nakano, T. 2004. Mili, a mammalian member of piwi family gene, is essential for spermatogenesis. *Development* 131: 839-849.
3. Lee, J.H., Engel, W. and Nayernia, K. 2005. Stem cell protein Piwil2 modulates expression of murine spermatogonial stem cell expressed genes. *Mol. Reprod. Dev.* 73: 173-179.
4. Lee, J.H., Schütte, D., Wulf, G., Füzesi, L., Radzun, H.J., Schweyer, S., Engel, W. and Nayernia, K. 2006. Stem-cell protein Piwil2 is widely expressed in tumors and inhibits apoptosis through activation of Stat3/Bcl-XL pathway. *Hum. Mol. Genet.* 15: 201-211.
5. Nayernia, K., Lee, J.H., Drusenheimer, N., Nolte, J., Wulf, G., Dressel, R., Gromoll, J. and Engel, W. 2006. Derivation of male germ cells from bone marrow stem cells. *Lab. Invest.* 86: 654-663.
6. Aravin, A., Gaidatzis, D., Pfeffer, S., Lagos-Quintana, M., Landgraf, P., Iovino, N., Morris, P., Brownstein, M.J., Kuramochi-Miyagawa, S., Nakano, T., Chien, M., Russo, J.J., Ju, J., Sheridan, R., Sander, C., Zavolan, M. and Tuschl, T. 2006. A novel class of small RNAs bind to MILI protein in mouse testes. *Nature* 442: 203-207.

CHROMOSOMAL LOCATION

Genetic locus: PIWIL2 (human) mapping to 8p21.3.

PRODUCT

PIWIL2 (h): 293T Lysate represents a lysate of human PIWIL2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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.

APPLICATIONS

PIWIL2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PIWIL2 antibodies. Recommended use: 10-20 μ l per lane.

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

RESEARCH USE

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

PROTOCOLS

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