AVEN (h): 293 Lysate: sc-112293



The Power to Question

BACKGROUND

AVEN, a cell death regulator, is an important signal inducer in acute leukemias. AVEN is a highly conserved peripheral membrane protein that protects the cell against the proteolytic activation of caspases, as well as Apaf-1 mediated apoptosis, by interfering with Apaf-1's ability to self-associate. Bcl-2 and Bad also interact with AVEN to prevent apoptosis. AVEN is highly expressed in ovary, heart, thymus, spleen, testis and colon, but can also be detected in other tissues. Erythropoietin and methylprednisolone may play important roles in the expression of AVEN in cardiac tissue, especially after a traumatic brain injury. In young patients suffering from acute lymphoblastic leukemia (ALL), AVEN expression may be a useful tool in prognosis prediction.

REFERENCES

- 1. Chau, B.N., Cheng, E.H., Kerr, D.A. and Hardwick, J.M. 2000. AVEN, a novel inhibitor of caspase activation, binds Bcl-x₁ and Apaf-1. Mol. Cell 6: 31-40.
- 2. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 605265. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 3. Ina, S., Tsunekawa, N., Nakamura, A. and Noce, T. 2003. Expression of the mouse AVEN gene during spermatogenesis, analyzed by subtraction screening using Mvh-knockout mice. Gene Expr. Patterns 3: 635-638.
- 4. Paydas, S., Tanriverdi, K., Yavuz, S., Disel, U., Sahin, B. and Burgut, R. 2003. Survivin and AVEN: two distinct antiapoptotic signals in acute leukemias. Ann. Oncol. 14: 1045-1050.
- Figueroa, B., Chen, S., Oyler, G.A., Hardwick, J.M. and Betenbaugh, M.J. 2004. AVEN to various culture conditions. Biotechnol. Bioeng. 85: 589-600.
- Kerl, H., Cerroni, L., Burg, G., Cerio, R., Gollnick, H. and Smoller, B.R. 2004. International board certification in dermatopathology: paving the way for the future. Am. J. Dermatopathol. 26: 439-440.
- 7. Choi, J., Hwang, Y.K., Sung, K.W., Kim, D.H., Yoo, K.H., Jung, H.L. and Koo, H.H. 2006. AVEN overexpression: association with poor prognosis in childhood acute lymphoblastic leukemia. Leuk. Res. 30: 1019-1025.
- 8. Ozisik, K., Ozisik, P., Yildirim, E., Misirlioglu, M. and Tuncer, S. 2006. Expression of antiapoptotic survivin and AVEN genes in rat heart tissue after traumatic brain injury. Transplant. Proc. 38: 2784-2787.
- Sauerwald, T.M., Figueroa, B., Hardwick, J.M., Oyler, G.A. and Betenbaugh, M.J. 2006. Combining caspase and mitochondrial dysfunction inhibitors of apoptosis to limit cell death in mammalian cell cultures. Biotechnol. Bioeng. 94: 362-372.

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: AVEN (human) mapping to 15q14.

PRODUCT

AVEN (h): 293 Lysate represents a lysate of human AVEN transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

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

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transected 293 cells.

RESEARCH USE

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

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