SANTA CRUZ BIOTECHNOLOGY, INC.

DOC1 (h): 293T Lysate: sc-114195

BACKGROUND

DOC1 (downregulated in ovarian cancer-1), also known as Filamin A-interacting protein 1-like and GPBP-interacting protein, is a 1,135 amino acid protein that was originally cloned from normal ovarian epithelial cell lines, but was consistently found to be absent in ovarian cancer cell lines. Knockdown of DOC1 mRNA results in suppression of the EMAP II-stimulated gene expression of DOC1 as well as four other genes, suggesting that DOC1 may mediate the effect of EMAP II. The gene encoding DOC1 is upregulated in endothelial cells treated with angiogenesis inhibitors, which alludes to its potential benefit as a antivascular reagent for cancer therapy. There are five isoforms of DOC1 that exist as a result of alternative splicing events.

REFERENCES

1. Mok, S.C., et al. 1994. Molecular cloning of differentially expressed genes in human epithelial ovarian cancer. Gynecol. Oncol. 52: 247-252.
2. Mok, S.C., et al. 1998. DOC2, a candidate tumor suppressor gene in human epithelial ovarian cancer. Oncogene 16: 2381-2387.
3. Santin, A.D., et al. 2004. Gene expression profiles in primary ovarian serous papillary tumors and normal ovarian epithelium: identification of candidate molecular markers for ovarian cancer diagnosis and therapy. Int. J. Cancer 112: 14-25.
4. Ing, N.H., et al. 2004. Gene expression in the spermatogenically inactive "dark" and maturing "light" testicular tissues of the prepubertal colt. J. Androl. 25: 535-544.
5. Tandle, A.T., et al. 2005. Endothelial monocyte activating polypeptide-II induced gene expression changes in endothelial cells. Cytokine 30: 347-358.
6. Kwon, M., et al. 2008. Functional characterization of Filamin a interacting protein 1-like, a novel candidate for antivascular cancer therapy. Cancer Res. 68: 7332-7341.

CHROMOSOMAL LOCATION

Genetic locus: FILIP1L (human) mapping to 3q12.1.

PRODUCT

DOC1 (h): 293T Lysate represents a lysate of human DOC1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

DOC1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive DOC1 antibodies. Recommended use: 10-20 µl per lane.

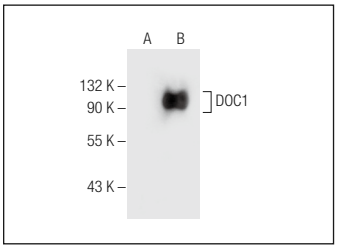
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

DOC1 (D-2): sc-376472 is recommended as a positive control antibody for Western Blot analysis of enhanced human DOC1 expression in DOC1 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



DOC1 (D-2): sc-376472. Western blot analysis of DOC1 expression in non-transfected: sc-117752 (**A**) and human DOC1 transfected: sc-114195 (**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.

PROTOCOLS

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