SANTA CRUZ BIOTECHNOLOGY, INC.

DOC1 (Y-16): sc-102495

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. DOC-2, 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; Filip1l (mouse) mapping to 16 C1.1.

SOURCE

DOC1 (Y-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of DOC1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102495 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

DOC1 (Y-16) is recommended for detection of DOC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

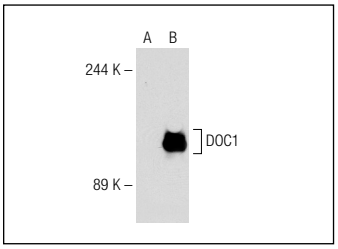
DOC1 (Y-16) is also recommended for detection of DOC1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DOC1 siRNA (h): sc-78325, DOC1 shRNA Plasmid (h): sc-78325-SH and DOC1 shRNA (h) Lentiviral Particles: sc-78325-V.

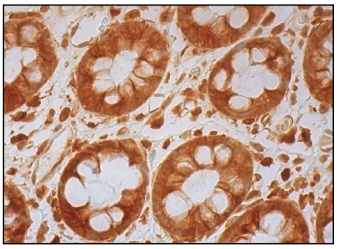
Molecular Weight of DOC1: 130 kDa.

Positive Controls: DOC1 (h): 293T Lysate: sc-114195.

DATA



DOC1 (Y-16): sc-102495. Western blot analysis of DOC1 expression in non-transfected: sc-117752 (**A**) and human DOC1 transfected: sc-114195 (**B**) 293T whole cell lysates.



DOC1 (Y-16): sc-102495. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic, membrane and nuclear staining of glandular cells and nuclear staining of endothelial 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.