

Fibulin-1 (A-5): sc-55470

BACKGROUND

Fibulin-1 is a modular glycoprotein component of the elastic extracellular matrix fibers, basement membranes and blood. Fibulin-1 self-associates as well as binds to calcium, Fibronectin, Laminin, Nidogen and Fibrinogen. These interactions, individually or in combination, may account for the observed association of Fibulin-1 with basement membranes, connective tissue elastic fibers and fibrin clots. Fibulin-1 expression is stimulated by estrogen in ovarian cancer cell lines and has been suggested as both an agent of metastasis in ovarian cancer cells and an indicator for predicting cancer risk or aggressiveness in ovarian carcinomas. Other studies point to the inhibition of cancer cell motility with increasing exposure to Fibulin-1. The exact function of Fibulin-1 in the cell is unknown.

REFERENCES

- Clinton, G.M., et al. 1996. Estrogens increase the expression of Fibulin-1, an extracellular matrix protein secreted by human ovarian cancer cells. *Proc. Natl. Acad. Sci. USA* 93: 316-320.
- Tran, H., et al. 1997. The self-association and Fibronectin-binding sites of Fibulin-1 map to calcium-binding epidermal growth factor-like domains. *J. Biol. Chem.* 272: 22600-22606.
- Barth, J.L., et al. 1998. Identification of chicken and *C. elegans* Fibulin-1 homologs and characterization of the *C. elegans* Fibulin-1 gene. *Matrix Biol.* 17: 635-646.

CHROMOSOMAL LOCATION

Genetic locus: FBLN1 (human) mapping to 22q13.31.

SOURCE

Fibulin-1 (A-5) is a mouse monoclonal antibody raised against amino acids 1-190 of Fibulin-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Fibulin-1 (A-5) is recommended for detection of Fibulin-1 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Fibulin-1 siRNA (h): sc-35372, Fibulin-1 shRNA Plasmid (h): sc-35372-SH and Fibulin-1 shRNA (h) Lentiviral Particles: sc-35372-V.

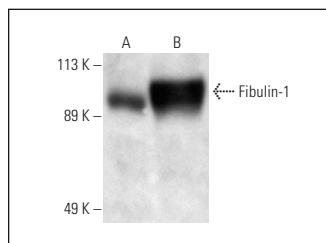
Molecular Weight of Fibulin-1: 100 kDa.

Positive Controls: ZR-75-1 cell lysate: sc-2241, CCD-1064Sk cell lysate: sc-2263 or HeLa whole cell lysate: sc-2200.

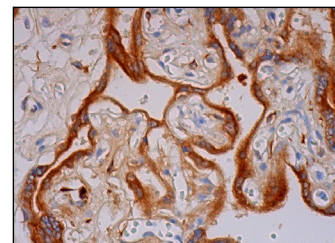
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Fibulin-1 (A-5): sc-55470. Western blot analysis of Fibulin-1 expression in HeLa (A) and ZR-75-1 (B) whole cell lysates.



Fibulin-1 (A-5): sc-55470. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells.

SELECT PRODUCT CITATIONS

- Jesse, S., et al. 2010. A proteomic approach for the diagnosis of bacterial meningitis. *PLoS ONE* 5: e10079.
- Wei, S., et al. 2022. Cathepsin F and Fibulin-1 as novel diagnostic biomarkers for brain metastasis of non-small cell lung cancer. *Br. J. Cancer* 126: 1795-1805.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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.



See **Fibulin-1 (B-5): sc-25281** for Fibulin-1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.