SANTA CRUZ BIOTECHNOLOGY, INC.

Fibulin-2 (F-19): sc-23126



BACKGROUND

Fibulin-1 and Fibulin-2 associate with Fibronectin and other extracellular matrix proteins. In bone marrow, Fibulin-1 and Fibulin-2 bind to Fibronectin in the adherent layer. 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 as an indicator for predicting cancer risk or aggressiveness in ovarian carcinomas. The mobility of cancer cells may be inhibited with increasing exposure to Fibulin-1. Fibulin-2 binds to the lectin domains of extracellular matrix proteins aggrecan, versican and brevican. Fibulin-2 is abundantly expressed in heart, placenta and ovarian tissue, where it localizes to basement membranes and connective tissue compartments. In mice, differential Fibulin-2 gene expression correlates with the early phase of diabetic kidneys and glomerulosclerosis. The gene encoding human Fibulin-2 maps to chromosome 3p25.1.

REFERENCES

- 1. Argraves, W.S., et al. 1989. Fibulin, a novel protein that interacts with the Fibronectin receptor β-subunit cytoplasmic domain. Cell 58: 623-629.
- 2. Pan, T.C., et al. 1993. Structure and expression of Fibulin-2, a novel extracellular matrix protein with multiple EGF-like repeats and consensus motifs for calcium binding. J. Cell Biol. 123: 1269-1277.
- 3. Zhang, R.Z., et al. 1994. Fibulin-2 (Fbln-2): human cDNA sequence, mRNA expression, and mapping of the gene on human and mouse chromosomes. Genomics 22: 425-430.
- 4. 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.
- 5. Roger, P., et al. 1998. Increased immunostaining of Fibulin-1, an estrogenregulated protein in the stroma of human ovarian epithelial tumors. Am. J. Pathol. 153: 1579-1588.
- 6. Hayashido, et al. 1998. Estradiol and Fibulin-1 inhibit motility of human ovarian- and breast-cancer cells induced by Fibronectin. Int. J. Cancer 75: 654-658.
- 7. Rochefort, H., et al. 1998. Estrogen receptor mediated inhibition of cancer cell invasion and motility: an overview. Steroid Biochem. Mol. Biol. 65: 163-168.
- 8. Gu, Y.C., et al. 2000. Association of extracellular matrix proteins Fibulin-1 and Fibulin-2 with Fibronectin in bone marrow stroma. Br. J. Haematol. 109: 305-313.
- 9. Olin, A.I., et al. 2001. The proteoglycans aggrecan and versican form networks with Fibulin-2 through Their lectin domain binding. J. Biol. Chem. 276: 1253-1261.

CHROMOSOMAL LOCATION

Genetic locus: FBLN2 (human) mapping to 3p25.1; Fbln2 (mouse) mapping to 6 D1.

RESEARCH USE

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

SOURCE

Fibulin-2 (F-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Fibulin-2 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23126 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Fibulin-2 (F-19) is recommended for detection of precursor and mature Fibulin-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Fibulin-2 (F-19) is also recommended for detection of precursor and mature Fibulin-2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Fibulin-2 siRNA (h): sc-43119, Fibulin-2 siRNA (m): sc-43120, Fibulin-2 shRNA Plasmid (h): sc-43119-SH, Fibulin-2 shRNA Plasmid (m): sc-43120-SH, Fibulin-2 shRNA (h) Lentiviral Particles: sc-43119-V and Fibulin-2 shRNA (m) Lentiviral Particles: sc-43120-V.

Molecular Weight of Fibulin-2: 195 kDa.

Positive Controls: JEG-3 whole cell lysate: sc-364255, JAR cell lysate: sc-2276 or CCD-1064Sk cell lysate: sc-2263.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

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

MONOS Satisfation Guaranteed

Try Fibulin-2 (H-5): sc-271843 or Fibulin-2 (B-10): sc-271263, our highly recommended monoclonal alternatives to Fibulin-2 (F-19).