

Fibulin-2 (B-10): sc-271263

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 estrogen-regulated protein in the stroma of human ovarian epithelial tumors. *Am. J. Pathol.* 153: 1579-1588.
6. Hayashido, Y., 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.

CHROMOSOMAL LOCATION

Genetic locus: FBLN2 (human) mapping to 3p25.1.

SOURCE

Fibulin-2 (B-10) is a mouse monoclonal antibody raised against amino acids 28-277 mapping near the N-terminus of Fibulin-2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Fibulin-2 (B-10) is recommended for detection of precursor and mature Fibulin-2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

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

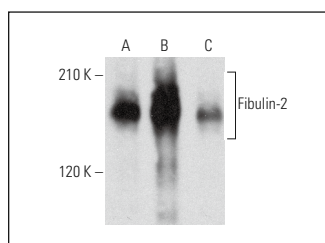
Molecular Weight of Fibulin-2: 195 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, JEG-3 whole cell lysate: sc-364255 or CCD-1064Sk cell lysate: sc-2263.

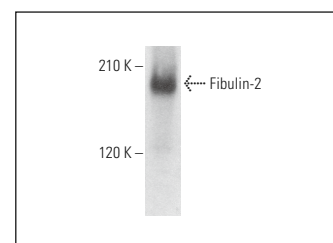
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Fibulin-2 (B-10): sc-271263. Western blot analysis of Fibulin-2 expression in CCD-1064Sk (A), JEG-3 (B) and HeLa (C) whole cell lysates.



Fibulin-2 (B-10): sc-271263. Western blot analysis of Fibulin-2 expression in SJRH30 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Barallobre-Barreiro, J., et al. 2016. Glycoproteomics reveals decorin peptides with anti-myostatin activity in human atrial fibrillation. *Circulation* 134: 817-832.
2. Li, S.D., et al. 2023. Fibulin-2: a negative regulator of BMSC osteogenic differentiation in infected bone fracture healing. *Exp. Mol. Med.* 55: 443-456.

RESEARCH USE

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