SANTA CRUZ BIOTECHNOLOGY, INC.

Fibulin-3 (N-16): sc-46100

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The Power to Question

BACKGROUND

Fibulin-1 is a modular glycoprotein component of elastic extracellular matrix fibers, basement membranes and blood. It can bind calcium, Fibronectin, Laminin, Nidogen and Fibrinogen. Estrogen exposure to ovarian cancer cell lines can upregulate Fibulin-1. Fibulin-2 is abundant in heart, placenta and ovarian tissue and binds several components of the extracelllar matrix including aggrecan, versican and brevican. Fibulin-3, also known as EFEMP1, is a secreted protein. Defects in the gene for Fibulin-3 cause the autosomal dominant disease Doyne honeycomb retinal dystrophy (DHRD, also known as malattia leventinese) which is characterized by yellow-white deposits (drusen) that accumulate under the retinal pigment epithelium. Fibulin-3 is not present at the site of drusen formation in normal eyes. Fibulin-5 is an integrin-binding extracellular matrix protein that mediates endothelial cell adhesion.

REFERENCES

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2. Giltay, R., et al. 1999. Sequence, recombinant expression and tissue localization of two novel extracellular matrix proteins, Fibulin-3 and Fibulin-4. Matrix Biol. 18: 469-480.
3. Stone, E.M., et al. 1999. A single EFEMP1 mutation associated with both malattia leventinese and Doyne honeycomb retinal dystrophy. Nat. Genet. 22: 199-202.
4. Matsumoto, M., et al. 2001. Dominant radial drusen and Arg345Trp EFEMP1 mutation. Am. J. Ophthalmol. 131: 810-812.
5. Marmorstein, L.Y., et al. 2002. Aberrant accumulation of EFEMP1 underlies drusen formation in malattia leventinese and age-related macular degeneration. Proc. Natl. Acad. Sci. USA 99: 13067-13072.
6. Klenotic, P.A., et al. 2004. Tissue inhibitor of metalloproteinases-3 (TIMP-3) is a binding partner of epithelial growth factor-containing fibulin-like extracellular matrix protein 1 (EFEMP1). Implications for macular degenerations. J. Biol. Chem. 279: 30469-30473.

CHROMOSOMAL LOCATION

Genetic locus: EFEMP1 (human) mapping to 2p16.1; Efemp1 (mouse) mapping to 11 A3.3.

SOURCE

Fibulin-3 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Fibulin-3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-46100 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Fibulin-3 (N-16) is recommended for detection of precursor and mature Fibulin-3 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Fibulin-3 (N-16) is also recommended for detection of precursor and mature Fibulin-3 in additional species, including canine.

Suitable for use as control antibody for Fibulin-3 siRNA (h): sc-44624, Fibulin-3 siRNA (m): sc-44625, Fibulin-3 shRNA Plasmid (h): sc-44624-SH, Fibulin-3 shRNA Plasmid (m): sc-44625-SH, Fibulin-3 shRNA (h) Lentiviral Particles: sc-44624-V and Fibulin-3 shRNA (m) Lentiviral Particles: sc-44625-V.

Molecular Weight of Fibulin-3: 55 kDa.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

SELECT PRODUCT CITATIONS

1. Wang, R., et al. 2010. Aberrant promoter methylation of FBLN-3 gene and clinicopathological significance in non-small cell lung carcinoma. Lung Cancer 69: 239-244.

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 or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **Fibulin-3 (C-3): sc-365224** or **Fibulin-3 (mab3-5): sc-33722**, our highly recommended monoclonal aternatives to Fibulin-3 (N-16). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Fibulin-3 (C-3): sc-365224**.