SANTA CRUZ BIOTECHNOLOGY, INC.

Fibulin-3 (C-3): sc-365224

SANTA CRUZ BIOTECHNOLOGY

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.

CHROMOSOMAL LOCATION

Genetic locus: EFEMP1 (human) mapping to 2p16.1.

SOURCE

Fibulin-3 (C-3) is a mouse monoclonal antibody raised against amino acids 67-215 mapping near the N-terminus of Fibulin-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Fibulin-3 (C-3) is available conjugated to agarose (sc-365224 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365224 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365224 PE), fluorescein (sc-365224 FITC), Alexa Fluor® 488 (sc-365224 AF488), Alexa Fluor® 546 (sc-365224 AF546), Alexa Fluor® 594 (sc-365224 AF594) or Alexa Fluor® 647 (sc-365224 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365224 AF680) or Alexa Fluor® 790 (sc-365224 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

Fibulin-3 (C-3) is recommended for detection of Fibulin-3 of 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).

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

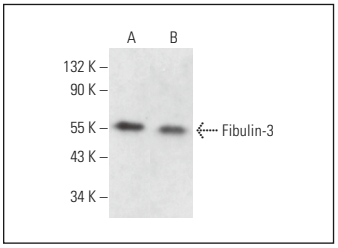
Molecular Weight of Fibulin-3: 55 kDa.

Positive Controls: HUV-EC-C whole cell lysate: sc-364180 or A549 cell lysate: sc-2413.

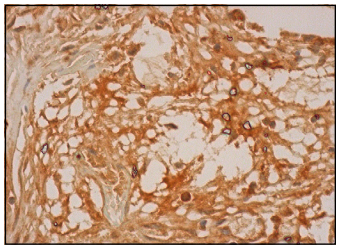
RECOMMENDED SUPPORT REAGENTS

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-3 (C-3): sc-365224. Western blot analysis of Fibulin-3 expression in HUV-EC-C (**A**) and A549 (**B**) whole cell lysates.



Fibulin-3 (C-3): sc-365224. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing cytoplasmic staining of hematopoietic cells and extracellular staining of fibrous tissue.

SELECT PRODUCT CITATIONS

1. Shun Xu, S., et al. 2014. Role of Fibulin-3 in lung cancer: *in vivo* and *in vitro* analyses. Oncol. Rep. 31: 79-86.
2. Kwak, J.H., et al. 2016. HIF2α/EFEMP1 cascade mediates hypoxic effects on breast cancer stem cell hierarchy. Oncotarget 7: 43518-43533.
3. Sequera, C., et al. 2018. TWEAK promotes migration and invasion in MEFs through a mechanism dependent on ERKs activation and Fibulin-3 down-regulation. J. Cell. Physiol. 233: 968-978.
4. Béguin, E.P., et al. 2020. Flow-induced reorganization of laminin-integrin networks within the endothelial basement membrane uncovered by proteomics. Mol. Cell. Proteomics 19: 1179-1192.
5. Cosentino, G., et al. 2020. MiR-9-mediated Inhibition of EFEMP1 contributes to the acquisition of pro-tumoral properties in normal fibroblasts. Cells 9: 2143.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.