SANTA CRUZ BIOTECHNOLOGY, INC.

Fibulin-3 (mab3-5): sc-33722

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; Efemp1 (mouse) mapping to 11 A3.3.

SOURCE

Fibulin-3 (mab3-5) is a mouse monoclonal antibody raised against a fusion protein corresponding to amino acids 107-493 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 (mab3-5) is available conjugated to agarose (sc-33722 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-33722 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-33722 PE), fluorescein (sc-33722 FITC), Alexa Fluor® 488 (sc-33722 AF488), Alexa Fluor® 546 (sc-33722 AF546), Alexa Fluor® 594 (sc-33722 AF594) or Alexa Fluor® 647 (sc-33722 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-33722 AF680) or Alexa Fluor® 790 (sc-33722 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Fibulin-3 (mab3-5) is recommended for detection of precursor and mature Fibulin-3 of mouse, rat and 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

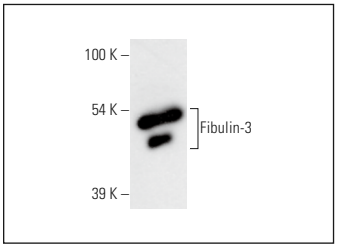
Suitable for use as control antibody for Fibulin-3 siRNA (h): sc-44624, Fibulin-3 siRNA (m): sc-44625, Fibulin-3 shRNA Plasmid (h): sc-44624-SH, Fibulin-3 shRNA Plasmid (m): sc-44625-SH, Fibulin-3 shRNA (h) Lentiviral Particles: sc-44624-V and Fibulin-3 shRNA (m) Lentiviral Particles: sc-44625-V.

Molecular Weight of Fibulin-3: 55 kDa.

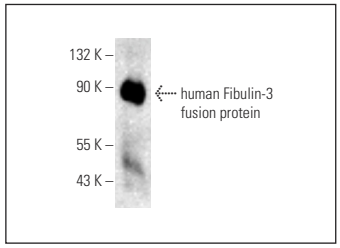
STORAGE

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

DATA



Fibulin-3 (mab3-5): sc-33722. Western blot analysis of Fibulin-3 expression in ARPE-19 conditioned media.



Fibulin-3 (mab3-5): sc-33722. Western blot analysis of human recombinant Fibulin-3 fusion protein. Detection reagent used: m-IgGκ BP-HRP.

SELECT PRODUCT CITATIONS

1. Hu, B., et al. 2009. Fibulin-3 is uniquely upregulated in malignant gliomas and promotes tumor cell motility and invasion. Mol. Cancer Res. 7: 1756-1770.
2. Ahn, K.H., et al. 2012. Relationship between the expression of Fibulin-3 and anterior vaginal wall prolapse. J. Obstet. Gynaecol. 32: 362-366.
3. Luo, R., et al. 2013. Decrease of Fibulin-3 in hepatocellular carcinoma indicates poor prognosis. PLoS ONE 8: e70511.
4. Yin, X., et al. 2016. EFEMP1 promotes ovarian cancer cell growth, invasion and metastasis via activated the Akt pathway. Oncotarget 7: 47938-47953.
5. Wang, S., et al. 2017. Fibulin-3 promotes osteosarcoma invasion and metastasis by inducing epithelial to mesenchymal transition and activating the Wnt/β-catenin signaling pathway. Sci. Rep. 7: 6215.
6. Li, J., et al. 2018. Fibulin-3 knockdown inhibits cervical cancer cell growth and metastasis *in vitro* and *in vivo*. Sci. Rep. 8: 10594.
7. Tasaki, M., et al. 2019. A novel age-related venous amyloidosis derived from EGF-containing Fibulin-like extracellular matrix protein 1. J. Pathol. 247: 444-455.
8. Katzeff, J.S., et al. 2020. Altered serum protein levels in frontotemporal dementia and amyotrophic lateral sclerosis indicate calcium and immunity dysregulation. Sci. Rep. 10: 13741.
9. Collantes, E.R.A., et al. 2021. EFEMP1 rare variants cause familial juvenile-onset open angle glaucoma. Hum. Mutat. 43: 240-252.
10. Xu, X., et al. 2022. Fibulin-3 regulates the inhibitory effect of TNF-α on chondrocyte differentiation partially via the TGF-β/Smad3 signaling pathway. Biochim. Biophys. Acta Mol. Cell Res. 1869: 119285.

RESEARCH USE

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