SANTA CRUZ BIOTECHNOLOGY, INC.

MFAP1 (C-25): sc-130170

BACKGROUND

Microfibrils are an important component of the extracellular matrix of many tissues and can either associate with or without elastin. Several microfibril associated proteins (MFAPs) have been cloned, including MFAP1, MFAP3 and MFAP4. The MFAP1 and MFAP3 genes are localized near the fibrillin genes FBN1 and FBN2, respectively. Mutations in FBN1 are linked to Marfan syndrome. Mutations in FBN2 have been linked to congenital contractural arachnodactyly. This suggests roles for MFAP1 and MFAP3 in heritable diseases affecting microfibrils. Deletion of MFAP4 was found in 30 of 31 patients with Smith-Magenis syndrome (SMS), a clinically recognizable multiple congenital anomaly/mental retardation syndrome.

REFERENCES

1. Yeh, H., et al. 1994. Structure of the human gene encoding the associated microfibrillar protein (MFAP1) and localization to chromosome 15q15-q21. Genomics 23: 443-449.
2. Abrams, W.R., et al. 1995. Molecular cloning of the microfibrillar protein MFAP3 and assignment of the gene to human chromosome 5q32-q33.2. Genomics 26: 47-54.
3. Zhao, Z., et al. 1995. The gene for a human microfibril-associated glycoprotein is commonly deleted in Smith-Magenis syndrome patients. Hum. Mol. Genet. 4: 589-597.
4. Liu, W., et al. 1997. The gene for microfibril-associated protein-1 (MFAP1) is located several megabases centromeric to FBN1 and is not mutated in Marfan syndrome. Hum. Genet. 99: 578-584.
5. Lausen, M., et al. 1999. Microfibril-associated protein 4 is present in lung washings and binds to the collagen region of lung surfactant protein D. J. Biol. Chem. 274: 32234-32240.
6. Schlosser, A., et al. 2006. Microfibril-associated protein 4 binds to surfactant protein A (SP-A) and colocalizes with SP-A in the extracellular matrix of the lung. Scand. J. Immunol. 64: 104-116.
7. Toyoshima, T., et al. 2008. Differential gene expression of 36 kDa microfibril-associated glycoprotein (MAGP-36/MFAP4) in rat organs. Cell Tissue Res. 332: 271-278.
8. Andersen, D.S. and Tapon, N. 2008. *Drosophila* MFAP1 is required for pre-mRNA processing and G_2/M progression. J. Biol. Chem. 283: 31256-31267.

CHROMOSOMAL LOCATION

Genetic locus: MFAP1 (human) mapping to 15q15.3.

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 or our catalog for detailed protocols and support products.

SOURCE

MFAP1 (C-25) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of MFAP1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MFAP1 (C-25) is recommended for detection of MFAP1 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MFAP1 siRNA (h): sc-89949, MFAP1 shRNA Plasmid (h): sc-89949-SH and MFAP1 shRNA (h) Lentiviral Particles: sc-89949-V.

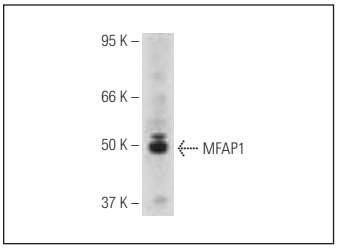
Molecular Weight of MFAP1: 52 kDa.

Positive Controls: A-375 whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



MFAP1 (C-25): sc-130170. Western blot analysis of MFAP1 expression in A-375 whole cell lysate.

RESEARCH USE

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