SANTA CRUZ BIOTECHNOLOGY, INC.

Fibulin-4 (H-40): sc-98443



BACKGROUND

Fibulin proteins contribute to normal development of elastic fiber systems in various types of organs that require elasticity, such as vasculature, lung and skin. Fibulin-4, also known as EFEMP2 (EGF-containing fibulin-like extracellular matrix protein 2), MBP1 or UPH1 is a 443 amino acid secreted protein that contains six EGF-like calcium-binding domains and belongs to the fibulin family. Expressed ubiquitously with highest expression in heart, Fibulin-4 is essential for connective tissue development and elastic fiber formation, and may also play an important role in vascular patterning and collagen biosynthesis. Defects in the gene encoding Fibulin-4 are associated with autosomal recessive cutis laxa type I (CL type I), a connective tissue disorder that is inherited in both an autosomal dominant and an autosomal recessive manner and is characterized by inelastic tissue in all affected areas of the body.

REFERENCES

- 1. 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.
- 2. Katsanis, N., et al. 2000. Isolation of a paralog of the Doyne honeycomb retinal dystrophy gene from the multiple retinopathy critical region on 11g13. Hum. Genet. 106: 66-72.
- 3. Gallagher, W.M., et al. 2001. Human Fibulin-4: analysis of its biosynthetic processing and mRNA expression in normal and tumour tissues. FEBS Lett. 489: 59-66.
- 4. Toto, L., et al. 2002. Genetic heterogeneity in Malattia Leventinese. Clin. Genet. 62: 399-403.
- 5. Hucthagowder, V., et al. 2006. Fibulin-4: a novel gene for an autosomal recessive cutis laxa syndrome. Am. J. Hum. Genet. 78: 1075-1080.

CHROMOSOMAL LOCATION

Genetic locus: EFEMP2 (human) mapping to 11q13.1; Efemp2 (mouse) mapping to 19 A.

SOURCE

Fibulin-4 (H-40) is a rabbit polyclonal antibody raised against amino acids 286-325 mapping within an internal region of Fibulin-4 of human origin.

PRODUCT

Each vial contains 200 µg lgG 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.

RESEARCH USE

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

APPLICATIONS

Fibulin-4 (H-40) is recommended for detection of Fibulin-4 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-4 (H-40) is also recommended for detection of Fibulin-4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Fibulin-4 siRNA (h): sc-75017, Fibulin-4 siRNA (m): sc-75018, Fibulin-4 shRNA Plasmid (h): sc-75017-SH, Fibulin-4 shRNA Plasmid (m): sc-75018-SH, Fibulin-4 shRNA (h) Lentiviral Particles: sc-75017-V and Fibulin-4 shRNA (m) Lentiviral Particles: sc-75018-V.

Molecular Weight of Fibulin-4: 61 kDa.

Positive Controls: mouse skin extract: sc-364251.

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 antirabbit 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Fibulin-4 (H-40): sc-98443. Western blot analysis of Fibulin-4 expression in mouse skin tissue extract

SELECT PRODUCT CITATIONS

1. Chen, J.Y., et al. 2013. Increased aortic stiffness and attenuated lysyl oxidase activity in obesity. Arterioscler. Thromb. Vasc. Biol. 33: 839-846.

MONOS Satisfation Guaranteed

Try Fibulin-4 (2C8): sc-293492, our highly recommended monoclonal alternative to Fibulin-4 (H-40).