

elastin (C-21): sc-17581

BACKGROUND

Elastic fibers, which are comprised primarily of elastin, endow loose connective tissue with a resilience that complements the tensile strength of collagenous fibers. Elastin is the main component of the extracellular matrix of arteries, and it performs a regulatory function during arterial development by controlling proliferation of smooth muscle and stabilizing arterial structure. Elastin is composed largely of glycine, proline, and other hydrophobic residues, and it contains multiple lysine-derived crosslinks, such as desmosines, which link individual polypeptide chains into a rubber-like network. During aging, the elasticity of connective tissue becomes reduced because of the cross-linking of collagenous fibers with elastin. Deficiencies of elastin are associated with multiple disorders, such as supravalvular aortic stenosis and Williams-Beuren syndrome. The human elastin gene maps to chromosome 7q11.23.

CHROMOSOMAL LOCATION

Genetic locus: ELN (human) mapping to 7q11.23; Eln (mouse) mapping to 5 G2.

SOURCE

elastin (C-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of elastin 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-17581 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

elastin (C-21) is recommended for detection of precursor tropoelastin and mature elastin 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).

Suitable for use as control antibody for elastin siRNA (h): sc-43360, elastin siRNA (m): sc-43361, elastin shRNA Plasmid (h): sc-43360-SH, elastin shRNA Plasmid (m): sc-43361-SH, elastin shRNA (h) Lentiviral Particles: sc-43360-V and elastin shRNA (m) Lentiviral Particles: sc-43361-V.

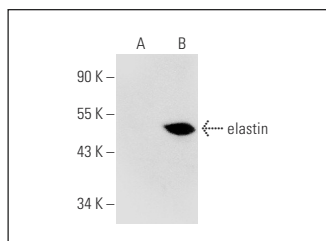
Molecular Weight of elastin: 70 kDa.

Positive Controls: elastin (h): 293T Lysate: sc-117067, A549 cell lysate: sc-2413 or MIA PaCa-2 cell lysate: sc-2285.

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.

DATA



elastin (C-21): sc-17581. Western blot analysis of elastin expression in non-transfected: sc-117750 (A) and human elastin transfected: sc-117067 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Boiy, A., et al. 2007. Effect of vehicles and esterification on the penetration and distribution of hypericin in the skin of hairless mice. *Photodiagnosis Photodyn. Ther.* 4: 130-139.
- Yamashita, M., et al. 2009. Surgical method to create vocal fold injuries in mice. *Ann. Otol. Rhinol. Laryngol.* 118: 131-138.
- Peacock, J.D., et al. 2010. Reduced sox9 function promotes heart valve calcification phenotypes *in vivo*. *Circ. Res.* 106: 712-719.
- Xu, X.G., et al. 2011. Immunohistological evaluation of skin responses after treatment using a fractional ultrapulse carbon dioxide laser on back skin. *Dermatol. Surg.* 37: 1141-1149.
- Rehan, V.K., et al. 2012. Effects of maternal food restriction on offspring lung extracellular matrix deposition and long term pulmonary function in an experimental rat model. *Pediatr. Pulmonol.* 47: 162-171.
- Attia-Vigneau, J., et al. 2013. Regeneration of human dermis by a multi-headed peptide. *J. Invest. Dermatol.* 134: 58-67.



Try **elastin (BA-4): sc-58756** or **elastin (E-11): sc-166543**, our highly recommended monoclonal alternatives to elastin (C-21). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **elastin (BA-4): sc-58756**.