

elastin (H-300): sc-25736

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 contains multiple lysine-derived crosslinks, such as desmosines, which link individual polypeptide chains into a rubber-like network. During ageing, the elasticity of connective tissue becomes reduced, due to 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.

REFERENCES

- Henin-Pizieux, O., et al. 1979. Isolation and characterization of desmosine(s) containing peptide fractions of normal and diseases human aortic elastin. *Paroi Arterielle* 5: 41-53.
- Cambell, N. 1990. *Biology*. Redwood City, CA: The Benjamin/Cummings Publishing Company, Inc., 784-785.
- Fazio, M.J., et al. 1991. Human elastin gene: new evidence for localization to the long arm of chromosome 7. *Am. J. Hum. Genet.* 48: 696-703.

CHROMOSOMAL LOCATION

Genetic locus: ELN (human) mapping to 7q11.23.

SOURCE

elastin (H-300) is a rabbit polyclonal antibody raised against amino acids 431-730 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.

APPLICATIONS

elastin (H-300) is recommended for detection of elastin 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) 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 shRNA Plasmid (h): sc-43360-SH and elastin shRNA (h) Lentiviral Particles: sc-43360-V.

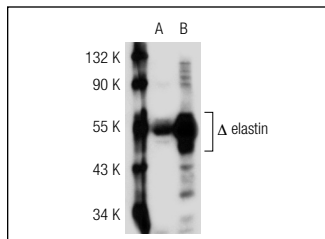
Molecular Weight of elastin: 70 kDa.

Positive Controls: elastin (h): 293T Lysate: sc-117067, A549 cell lysate: sc-2413 or MES-SA/Dx5 cell lysate: sc-2284.

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). 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



elastin (H-300): sc-25736. Western blot analysis of elastin expression in non-transfected: sc-117752 (A) and truncated human elastin transfected: sc-117067 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Bousquet, M., et al. 2006. A novel PAX5-ELN fusion protein identified in B-cell acute lymphoblastic leukemia acts as a dominant negative on wild-type PAX5. *Blood* 109: 3417-3423.
- Sharma, A.K., et al. 2010. Urinary bladder smooth muscle regeneration utilizing bone marrow derived mesenchymal stem cell seeded elastomeric poly(1,8-octanediol-co-citrate) based thin films. *Biomaterials* 31: 6207-6217.

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.



Try **elastin (BA-4): sc-58756** or **elastin (E-11): sc-166543**, our highly recommended monoclonal alternatives to elastin (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **elastin (BA-4): sc-58756**.