SANTA CRUZ BIOTECHNOLOGY, INC.

LOXL1 (H-165): sc-66949

BACKGROUND

Lysyl oxidase (LOX) proteins belong to a family of enzymes that oxidize primary amine substrates to reactive aldehydes. In fibrillar collagens and elastin, LOX catalyzes the lysine-derived cross-links of collagen fibrils and insoluble elastic fibers in the extracellular matrix. It can localize both to the nucleus and the cytoplasm. LOX is involved in tumor suppression, cell motility, cellular senescence and developmental regulation. There are four homologs of LOX, lysyl oxidase-like proteins, designated LOX-like (LOXL1-LOXL4) proteins. LOXL1 is an extracellular protein that localizes specifically to sites of elastogenesis. It serves as a cross-linking enzyme, controlling the deposition of elastin. LOXL1 interacts with Fibulin-5.

REFERENCES

1. Kenyon, K., et al. 1993. A novel human cDNA with a predicted protein similar to lysyl oxidase maps to chromosome 15q24-q25. J. Biol. Chem. 268: 18435-18437.
2. Goy, A., et al. 2000. Physical linkage of the lysyl oxidase-like (LOXL1) gene to the PML gene on human chromosome 15q22. Cytogenet. Cell Genet. 88: 22-24.

CHROMOSOMAL LOCATION

Genetic locus: LOXL1 (human) mapping to 15q24.1; Loxl1 (mouse) mapping to 9 B.

SOURCE

LOXL1 (H-165) is a rabbit polyclonal antibody raised against amino acids 96-260 mapping within an internal region of LOXL1 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

LOXL1 (H-165) is recommended for detection of LOXL1 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), immunohistochemistry (including paraffin-embedded sections) (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 LOXL1 siRNA (h): sc-45220, LOXL1 siRNA (m): sc-45221, LOXL1 shRNA Plasmid (h): sc-45220-SH, LOXL1 shRNA Plasmid (m): sc-45221-SH, LOXL1 shRNA (h) Lentiviral Particles: sc-45220-V and LOXL1 shRNA (m) Lentiviral Particles: sc-45221-V.

Molecular Weight of LOXL1 precursor: 56 kDa.

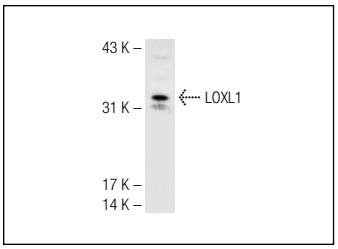
Molecular Weight of mature LOXL1: 32 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or SJRH30 cell lysate: sc-2287.

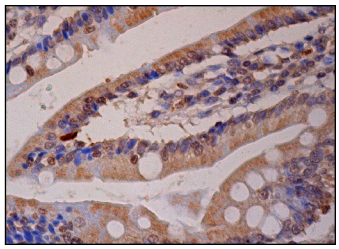
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



LOXL1 (H-165): sc-66949. Western blot analysis of LOXL1 expression in Jurkat whole cell lysate.



LOXL1 (H-165): sc-66949. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic and nuclear staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Bertram, C. and Hass, R. 2009. Cellular senescence of human mammary epithelial cells (HMEC) is associated with an altered MMP-7/HB-EGF signaling and increased formation of elastin-like structures. Mech. Ageing Dev. 130: 657-669.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.