

LOXL3 (H-70): sc-68939

BACKGROUND

Lysyl oxidase (LOX) proteins belong to a family of enzymes that oxidize primary amine substrated 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. LOXL3 is an extracellular protein that localizes specifically to sites of elastogenesis. LOXL2 and LOXL3 can interact and cooperate with the snail protein to down-regulate E-cadherin expression. In epithelial cells, overexpression of LOXL2 or LOXL3 may induce an epithelial-mesenchymal transitions process, an important element in tumor progression. LOXL3 is a widely expressed protein with highest levels of expression in placenta, small intestine, testis, heart, ovary and spleen.

REFERENCES

1. Jourdan-Le Saux, C., et al. 1999. The LOXL2 gene encodes a new LOX-like protein and is expressed at high levels in reproductive tissues. *J. Biol. Chem.* 274: 12939-12944.
2. Huang, Y., et al. 2001. Cloning and characterization of a human lysyl oxidase-like 3 gene (hLOXL3). *Matrix Biol.* 20: 153-157.

CHROMOSOMAL LOCATION

Genetic locus: LOXL3 (human) mapping to 2p13.1; Loxl3 (mouse) mapping to 6 C3.

SOURCE

LOXL3 (H-70) is a rabbit polyclonal antibody raised against amino acids 111-180 mapping near the N-terminus of LOXL3 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

LOXL3 (H-70) is recommended for detection of LOXL3 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).

LOXL3 (H-70) is also recommended for detection of LOXL3 in additional species, including equine, canine, bovine and porcine.

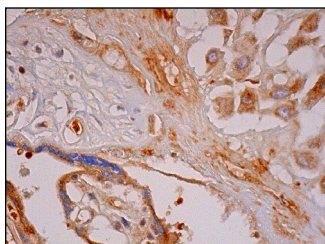
Suitable for use as control antibody for LOXL3 siRNA (h): sc-45224, LOXL3 siRNA (m): sc-45225, LOXL3 shRNA Plasmid (h): sc-45224-SH, LOXL3 shRNA Plasmid (m): sc-45225-SH, LOXL3 shRNA (h) Lentiviral Particles: sc-45224-V and LOXL3 shRNA (m) Lentiviral Particles: sc-45225-V.

Molecular Weight of LOXL3: 83 kDa.

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



LOXL3 (H-70): sc-68939. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells and decidual cells and extracellular staining of connective tissue.

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.


 MONOS
Satisfaction
Guaranteed

Try **LOXL3 (E-6): sc-377216** or **LOXL3 (A-2): sc-365286**, our highly recommended monoclonal alternatives to LOXL3 (H-70).