

LOX (H-140): sc-66947

BACKGROUND

The lysyl oxidase family of extracellular proteins includes LOX and four LOX-like enzymes, which are responsible for the deamination of peptidyl lysine residues of collagens and elastin. They also catalyze inter- and intra-crosslinking reactions. Overexpression of LOX may cause severe fibrotic degeneration due to its high resistance to degradative enzymes. Procollagen C-proteinase activity processes LOX from a precursor protein to a mature form. Activation of LOX occurs in normal developing and adult skin, and alterations in LOX expression and activity are associated with skin aging and senescence. LOX is crucial for development of the cardiovascular and respiratory systems. In addition, LOX plays a role in cancer, wound healing, as well as cell motility, chemotaxis and differentiation.

CHROMOSOMAL LOCATION

Genetic locus: LOX (human) mapping to 5q23.2.

SOURCE

LOX (H-140) is a rabbit polyclonal antibody raised against amino acids 71-210 mapping within an internal region of LOX 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

LOX (H-140) is recommended for detection of Lysyl oxidase of human and, to a lesser extent, hamster 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 LOX siRNA (h): sc-45218, LOX shRNA Plasmid (h): sc-45218-SH and LOX shRNA (h) Lentiviral Particles: sc-45218-V.

Molecular Weight of LOX proenzyme: 50 kDa.

Molecular Weight of mature LOX: 30 kDa.

Positive Controls: JAR cell lysate: sc-2276, WI-38 whole cell lysate: sc-364260 or JEG-3 whole cell lysate: sc-364255.

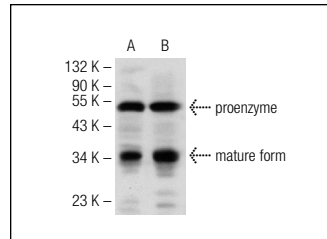
RECOMMENDED SECONDARY REAGENTS

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.

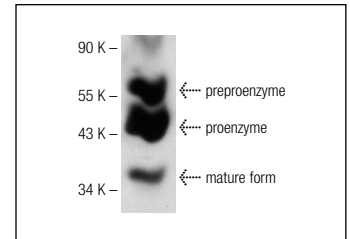
RESEARCH USE

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

DATA



LOX (H-140): sc-66947. Western blot analysis of LOX expression in CHO (A) and JAR (B) whole cell lysates.



LOX (H-140): sc-66947. Western blot analysis of LOX expression in WI 38 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Qiu, Y., et al. 2010. Dihydrotestosterone suppresses foam cell formation and attenuates atherosclerosis development. *Endocrinology* 151: 3307-3316.
2. Thaler, R., et al. 2011. Homocysteine suppresses the expression of the collagen cross-linker lysyl oxidase involving IL-6, Fli1, and epigenetic DNA methylation. *J. Biol. Chem.* 286: 5578-5588.
3. Qiu, Y., et al. 2012. Dihydrotestosterone inhibits lectin-like oxidized-LDL receptor-1 expression in aortic endothelial cells via a NF-κB/AP-1-mediated mechanism. *Endocrinology* 153: 3405-3415.
4. Sankar, S., et al. 2012. Mechanism and relevance of EWS/FLI-mediated transcriptional repression in Ewing sarcoma. *Oncogene*. E-published.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **LOX (F-8): sc-373995**, our highly recommended monoclonal alternative to LOX (H-140). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **LOX (F-8): sc-373995**.