LOXL4 (h3): 293T Lysate: sc-158696



The Power to Question

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 within 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. LOXL4 is an extracellular protein that is widely expressed. Highest expression levels have been detected in testis, pancreas, cartilage and skeletal muscle.

REFERENCES

- Ito, H., Akiyama, H., Iguchi, H., Iyama, K., Miyamoto, M., Ohsawa, K. and Nakamura, T. 2001. Molecular cloning and biological activity of a novel LOX-related gene expressed in cartilage. J. Biol. Chem. 276: 24023-24029.
- Asuncion, L., Fogelgren, B., Fong, K.S., Fong, S.F., Kim, Y. and Csiszar, K. 2001. A novel human lysyl oxidase-like gene (LOXL4) on chromosome 10q24 has an altered scavenger receptor cysteine-rich domain. Matrix Biol. 20: 487-491.
- 3. Maki, J.M., Tikkanen, H. and Kivirikko, K.I. 2001. Cloning and characterization of a fifth human LOX isoenzyme: the third member of the LOX-related subfamily with four scavenger receptor cysteine-rich domains. Matrix Biol. 20: 493-496.
- Kirschmann, D.A., Seftor, E.A., Fong, S.F., Nieva, D.R., Sullivan, C.M., Edwards, E.M., Sommer, P., Csiszar, K. and Hendrix, M.J. 2002. A molecular role for LOX in breast cancer invasion. Cancer Res. 62: 4478-4483.
- Bronson, N.W., Hamilton, J.S., Han, M., Li, P.A., Hornstra, I., Horowitz, J.M. and Horwitz, B.A. 2005. LOXL null mice demonstrate selective dentate structural changes but maintain dentate granule cell and CA1 pyramidal cell potentiation in the hippocampus. Neurosci. Lett. 390: 118-122.
- 6. Kim, D.J., Lee, D.C., Yang, S.J., Lee, J.J., Bae, E.M., Kim, D.M., Min, S.H., Kim, S.J., Kang, D.C., Sang, B.C., Myung, P.K., Park, K.C. and Yeom, Y.I. 2008. Lysyl oxidase like 4, a novel target gene of TGFβ1 signaling, can negatively regulate TGFβ1-induced cell motility in PLC/PRF/5 hepatoma cells. Biochem. Biophys. Res. Commun. 373: 521-527.
- Weise, J.B., Rudolph, P., Heiser, A., Kruse, M.L., Hedderich, J., Cordes, C., Hoffmann, M., Brant, O., Ambrosch, P., Csiszar, K. and Görögh, T. 2008. LOXL4 is a selectively expressed candidate diagnostic antigen in head and neck cancer. Eur. J. Cancer 44: 1323-1331.

CHROMOSOMAL LOCATION

Genetic locus: LOXL4 (human) mapping to 10q24.2.

PRODUCT

LOXL4 (h3): 293T Lysate represents a lysate of human LOXL4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

LOXL4 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive LOXL4 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

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