

Store at
-20°C

LOX (D8F2K) Rabbit mAb

Cell Signaling
TECHNOLOGY®

#58135

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www.cellsignal.com/supportOrders: 877-616-2355 (U.S.)
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UniProt ID #P28300

New 05/18

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W Endogenous	Species Cross-Reactivity* H, M	Molecular Wt. 54, 56 kDa	Isotype Rabbit IgG**
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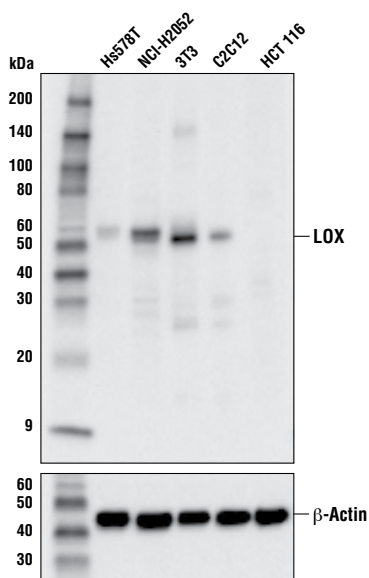
Background: LOX (lysyl oxidase) is a secreted copper-dependent amine oxidase and a member of the lysyl oxidase family (1). It primarily catalyzes the oxidation of lysine (or hydroxy-lysine) residues in collagen and elastin to form peptidyl aldehyde derivatives (2). These modifications are required for further cross-linking of target proteins to enhance ECM (extracellular matrix) stiffness. LOX plays critical roles in vascular, lung, and skin development, and tissue damage repair (3-5). Upregulation of LOX is associated with various diseases, including cancer progression and tissue fibrosis. Aberrant LOX activity creates a favorable tumor microenvironment to promote tumor metastasis and distal colonization (6-8).

Background References:

- (1) Xiao, Q. and Ge, G. (2012) *Cancer Microenviron* 5, 261-73.
- (2) Trackman, P.C. (2016) *Expert Opin Ther Targets* 20, 935-45.
- (3) Hornstra, I.K. et al. (2003) *J Biol Chem* 278, 14387-93.
- (4) Mäki, J.M. et al. (2005) *Am J Pathol* 167, 927-36.
- (5) Szauder, K.M. et al. (2005) *Pathol Biol (Paris)* 53, 448-56.
- (6) Wang, T.H. et al. (2016) *Int J Mol Sci* 18s.
- (7) Cox, T.R. et al. (2015) *Nature* 522, 106-110.
- (8) Reynaud, C. et al. (2017) *Cancer Res* 77, 268-278.

Specificity/Sensitivity: LOX (D8F2K) Rabbit mAb recognizes endogenous levels of total LOX protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the human LOX protein.



Western blot analysis of extracts from various cell lines using LOX (D8F2K) Rabbit mAb (upper) and β -Actin (D6A8) Rabbit mAb #8457 (lower).

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C . Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com.

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.