

#58135 Store at -20°C

LOX (D8F2K) Rabbit mAb**Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M	Endogenous	54, 56	Rabbit IgG	#P28300	4015

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
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.	
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 hydroxylysine) 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	<ol style="list-style-type: none"> 1. Xiao, Q. and Ge, G. (2012) <i>Cancer Microenviron</i> 5, 261-73. 2. Trackman, P.C. (2016) <i>Expert Opin Ther Targets</i> 20, 935-45. 3. Hornstra, I.K. et al. (2003) <i>J Biol Chem</i> 278, 14387-93. 4. Mäki, J.M. et al. (2005) <i>Am J Pathol</i> 167, 927-36. 5. Szauter, K.M. et al. (2005) <i>Pathol Biol (Paris)</i> 53, 448-56. 6. Wang, T.H. et al. (2016) <i>Int J Mol Sci</i> 18, . 7. Cox, T.R. et al. (2015) <i>Nature</i> 522, 106-110. 8. Reynaud, C. et al. (2017) <i>Cancer Res</i> 77, 268-278. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus 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 GP: Guinea Pig Rab: rabbit All: all species expected
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