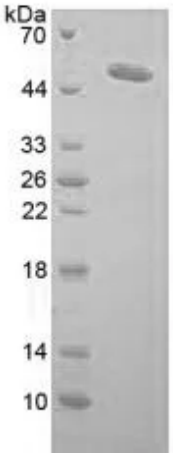
Active Lysyl Oxidase (LOX)

Catalog#:PEH12855

概述（Summary）

别称（Alternative Names）	Protein-Lysine 6-Oxidase
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Pro213-Tyr417】
Accession #	P28300
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	53.7 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Responsible for the post-translational oxidative deamination of peptidyl lysine residues in precursors to fibrous collagen and elastin. Regulator of Ras expression. May play a role in tumor suppression. Plays a role in the aortic wall architecture.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

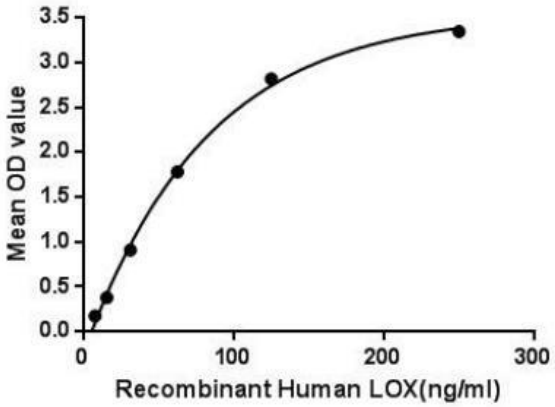


Figure 1. The binding activity of LOX with ELN.

Lysyl oxidase (LOX) also known as protein-lysine 6-oxidase is an extracellular copper-dependent enzyme that catalyzes formation of aldehydes from lysine residues in collagen and elastin precursors. Its catalytic activity depends upon both its copper cofactor and a unique carbonyl cofactor and has been shown to extend to a variety of basic globular proteins, including histone H1. LOX plays a major role in connective tissue development and may also be important in neurological function. Lysyl oxidase has also proven crucial to the development of the respiratory system and the skin, the commitment step of adipocyte, and the formation of pluripotent stem cells during development. Its absence may lead to defects in the transforming growth factor beta superfamily of proteins, which control cell growth and differentiation. Besides, Elastin (ELN) has been identified as an interactor of LOX, thus a binding ELISA assay was conducted to detect the interaction of recombinant human LOX and recombinant human ELN. Briefly, LOX were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to ELN-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-LOX pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of LOX and ELN was shown in Figure 1, and this effect was in a dose dependent manner.

注意事项（Note）

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