

Recombinant Human LOX protein, His-GST-tagged

Cat. No. LOX-7911H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human LOX protein(Pro213~Tyr417), fused with N-terminal Histag and GST tag, was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Pro213~Tyr417
Tag	N-His-GST
Form	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	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

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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°C. 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°C. 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.

Molecular Mass	53.7kDa
Purity	> 90%
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month, -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	LOX lysyl oxidase [Homo sapiens]
Official Symbol	LOX
Synonyms	LOX; lysyl oxidase; protein-lysine 6-oxidase; MGC105112;
Gene ID	4015
mRNA Refseq	NM_001178102

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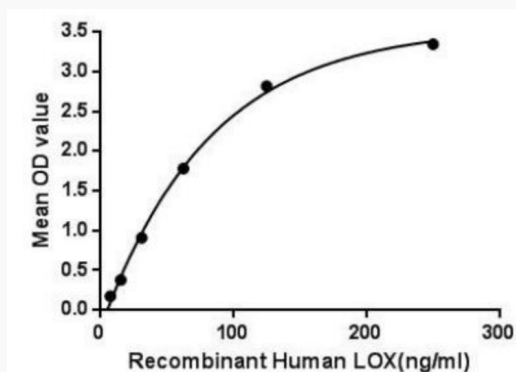
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Protein Refseq NP_001171573

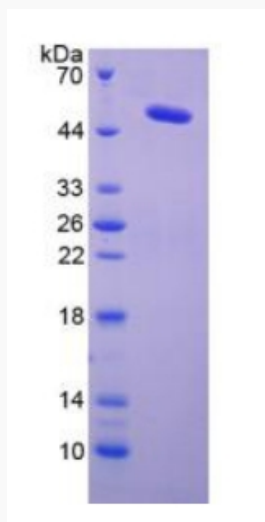
MIM 153455

UniProt ID P28300

Activity



SDS-PAGE



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