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## Product Datasheet

### Human LOX protein, His and GST tag, Unconjugated GTX00167-PRO

Article Name	Human LOX protein, His and GST tag, Unconjugated
Biozol Catalog Number	GTX00167-PRO
Supplier Catalog Number	GTX00167-pro
Alternative Catalog Number	GTX00167-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	<a href="#">4015</a>
UniProt	<a href="#">P28300</a>
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His and GST-Tag, Pro213~Tyr417 (NP_002308.2)

#### Application Notes

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 100 µl were then transferred to ELN-coated microtiter wells and incubated for 2h at 37C. 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 37C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of LOX and ELN was in a dose dependent manner.