10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# LOX Antibody (Center) (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2166a

## Product Information

| | |
|---|---|
| **Application** | WB, E |
| **Primary Accession** | P28300 |
| **Other Accession** | P16636, P45845, P28301, NP_002308.2 |
| **Reactivity** | Human |
| **Predicted** | Mouse, Pig, Rat |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | IgG2b |
| **Clone Names** | 624CT23.7.3 |
| **Calculated MW** | 46944 |
| **Antigen Region** | 234-260 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 4015 |
| **Other Names** | Protein-lysine 6-oxidase, Lysyl oxidase, LOX |
| **Target/Specificity** | This LOX antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 234-260 amino acids from the Central region of human LOX. |
| **Dilution** | WB~~1:200~1600 E~~Use at an assay dependent concentration. |
| **Format** | Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | LOX Antibody (Center) (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | LOX |
| **Function** | Responsible for the post-translational oxidative deamination of peptidyl lysine residues in precursors to fibrous collagen and elastin (PubMed:26838787). Regulator of Ras expression. May play a role in tumor suppression. Plays a role in the aortic wall architecture (By similarity). |

| | |
|---|---|
| **Cellular Location** | Secreted. Secreted, extracellular space |
| **Tissue Location** | Heart, placenta, skeletal muscle, kidney, lung and pancreas. |

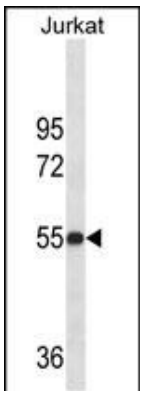
## Background

The protein encoded by this gene is an extracellular copper enzyme that initiates the crosslinking of collagens and elastin. The enzyme catalyzes oxidative deamination of the epsilon-amino group in certain lysine and hydroxylysine residues of collagens and lysine residues of elastin. In addition to crosslinking extracellular matrix proteins, the encoded protein may have a role in tumor suppression. Defects in this gene are a cause of autosomal recessive cutis laxa type I (CL type I). Two transcript variants encoding different isoforms have been found for this gene.

## References

Gao, Y., et al. Proc. Natl. Acad. Sci. U.S.A. 107(44):18892-18897(2010)
Santhanam, A.N., et al. Oncogene 29(27):3921-3932(2010)
Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Wang, X., et al. PLoS ONE 5 (8), E11934 (2010) :

## Images




LOX Antibody (Center)(Ascites)(Cat. #AM2166a) western blot analysis in Jurkat cell line lysates (35µg/lane).This demonstrates the LOX antibody detected the LOX protein (arrow).