

产品名称: LOXL2 (9U1) Rabbit Monoclonal Antibody  
产品货号: AMRe13377



## 产品概述 (Summary)

|                        |                                        |
|------------------------|----------------------------------------|
| 产品名称 (Production Name) | LOXL2 (9U1) Rabbit Monoclonal Antibody |
| 描述 (Description)       | Recombinant rabbit monoclonal antibody |
| 宿主 (Host)              | Rabbit                                 |
| 应用 (Application)       | WB,IP                                  |
| 种属反应性 (Reactivity)     | Human                                  |

## 产品性能 (Performance)

|                     |                                                                                                                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 偶联物 (Conjugation)   | Unconjugated                                                                                                                                                                                 |
| 修饰 (Modification)   | Unmodified                                                                                                                                                                                   |
| 同种型 (Isotype)       | IgG                                                                                                                                                                                          |
| 克隆 (Clonality)      | Monoclonal                                                                                                                                                                                   |
| 形式 (Form)           | Liquid                                                                                                                                                                                       |
| 存放说明 (Storage)      | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.                                                                                                     |
| 储存溶液 (Buffer)       | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |
| 纯化方式 (Purification) | Affinity purification                                                                                                                                                                        |

## 免疫原信息 (Immunogen)

|                        |                                                                             |
|------------------------|-----------------------------------------------------------------------------|
| 基因名 (Gene Name)        | LOXL2                                                                       |
| 别名 (Alternative Names) | LOR2; LOX L2; LOXL2; Lysyl oxidase homolog 2; Lysyl oxidase like 2; WS9 14; |
| 基因 ID (Gene ID)        | 4017.0                                                                      |
| 蛋白 ID (SwissProt ID)   | Q9Y4K0.                                                                     |

## 产品应用 (Application)

|                          |                              |
|--------------------------|------------------------------|
| 稀释比 (Dilution Ratio)     | WB 1:500-1:2000,IP 1:20-1:50 |
| 蛋白分子量 (Molecular Weight) | 87kDa                        |

## 研究背景 (Background)

**产品名称: LOXL2 (9U1) Rabbit Monoclonal Antibody**  
**产品货号: AMRe13377**



Mediates the post-translational oxidative deamination of lysine residues on target proteins leading to the formation of deaminated lysine (allysine). When secreted in extracellular matrix, promotes cross-linking of extracellular matrix proteins by mediating oxidative deamination of peptidyl lysine residues in precursors to fibrous collagen and elastin. Mediates the post-translational oxidative deamination of lysine residues on target proteins leading to the formation of deaminated lysine (allysine) (PubMed:<a href="http://www.uniprot.org/citations/27735137" target="\_blank">27735137</a>). Acts as a transcription corepressor and specifically mediates deamination of trimethylated 'Lys-4' of histone H3 (H3K4me3), a specific tag for epigenetic transcriptional activation (PubMed:<a href="http://www.uniprot.org/citations/27735137" target="\_blank">27735137</a>). Shows no activity against histone H3 when it is trimethylated on 'Lys-9' (H3K9me3) or 'Lys-27' (H3K27me3) or when 'Lys-4' is monomethylated (H3K4me1) or dimethylated (H3K4me2) (PubMed:<a href="http://www.uniprot.org/citations/27735137" target="\_blank">27735137</a>). Also mediates deamination of methylated TAF10, a member of the transcription factor IID (TFIID) complex, which induces release of TAF10 from promoters, leading to inhibition of TFIID-dependent transcription (PubMed:<a href="http://www.uniprot.org/citations/25959397" target="\_blank">25959397</a>). LOXL2-mediated deamination of TAF10 results in transcriptional repression of genes required for embryonic stem cell pluripotency including POU5F1/OCT4, NANOG, KLF4 and SOX2 (By similarity). Involved in epithelial to mesenchymal transition (EMT) via interaction with SNAI1 and participates in repression of E-cadherin CDH1, probably by mediating deamination of histone H3 (PubMed:<a href="http://www.uniprot.org/citations/16096638" target="\_blank">16096638</a>, PubMed:<a href="http://www.uniprot.org/citations/27735137" target="\_blank">27735137</a>, PubMed:<a href="http://www.uniprot.org/citations/24414204" target="\_blank">24414204</a>). During EMT, involved with SNAI1 in negatively regulating pericentromeric heterochromatin transcription (PubMed:<a href="http://www.uniprot.org/citations/24239292" target="\_blank">24239292</a>). SNAI1 recruits LOXL2 to pericentromeric regions to oxidize histone H3 and repress transcription which leads to release of heterochromatin component CBX5/HP1A, enabling chromatin reorganization and acquisition of mesenchymal traits (PubMed:<a href="http://www.uniprot.org/citations/24239292" target="\_blank">24239292</a>). Interacts with the endoplasmic reticulum protein HSPA5 which activates the IRE1-XBP1 pathway of the unfolded protein response, leading to expression of several transcription factors involved in EMT and subsequent EMT induction (PubMed:<a href="http://www.uniprot.org/citations/28332555" target="\_blank">28332555</a>). Involved in E-cadherin repression following hypoxia, a hallmark of EMT believed to amplify tumor aggressiveness, suggesting that it may play a role in tumor progression (PubMed:<a href="http://www.uniprot.org/citations/20026874" target="\_blank">20026874</a>). When secreted into the extracellular matrix, promotes cross-linking of extracellular matrix proteins by mediating oxidative deamination of peptidyl lysine residues in precursors to fibrous collagen and elastin (PubMed:<a href="http://www.uniprot.org/citations/20306300" target="\_blank">20306300</a>). Acts as a regulator of sprouting angiogenesis, probably via collagen IV scaffolding (PubMed:<a href="http://www.uniprot.org/citations/21835952" target="\_blank">21835952</a>). Acts as a regulator of chondrocyte differentiation, probably by regulating expression of factors that control chondrocyte differentiation (By similarity).

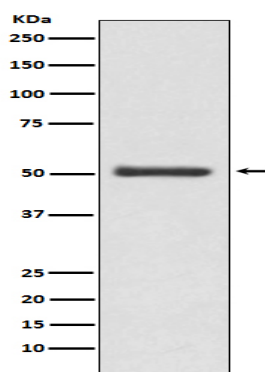
产品名称: LOXL2 (9U1) Rabbit Monoclonal Antibody  
产品货号: AMRe13377



## 研究领域 (Research Area)

Signal Transduction

## 图片 (Image Data)



Western blot analysis of LOXL2 expression in MCF7 cell lysate.

## 注意事项 (Note)

For research use only .