

ARG58833 anti-LOXL2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes LOXL2
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Bov
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	LOXL2
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 739-770 of Human LOXL2 (HRIWMYNNCHIGGSFSEETKKFEHFSGLLNNQ).
Conjugation	Un-conjugated
Alternate Names	Lysyl oxidase-related protein 2; Lysyl oxidase-related protein WS9-14; LOR2; Lysyl oxidase-like protein 2; Lysyl oxidase homolog 2; EC 1.4.3.13; WS9-14

Application Instructions

Application table	Application	Dilution
	WB	0.1 - 0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

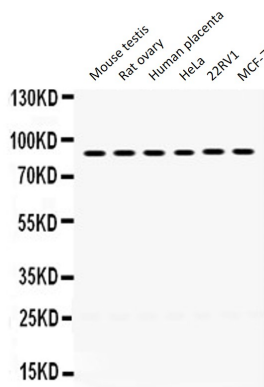
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	LOXL2
Gene Full Name	lysyl oxidase-like 2
Background	This gene encodes a member of the lysyl oxidase gene family. The prototypic member of the family is essential to the biogenesis of connective tissue, encoding an extracellular copper-dependent amine oxidase that catalyses the first step in the formation of crosslinks in collagens and elastin. A highly conserved amino acid sequence at the C-terminus end appears to be sufficient for amine oxidase activity, suggesting that each family member may retain this function. The N-terminus is poorly conserved and may impart additional roles in developmental regulation, senescence, tumor suppression, cell growth control, and chemotaxis to each member of the family. [provided by RefSeq, Jul 2008]
Function	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. Acts as a regulator of sprouting angiogenesis, probably via collagen IV scaffolding. When nuclear, acts as a transcription corepressor and specifically mediates deamination of trimethylated 'Lys-4' of histone H3 (H3K4me3), a specific tag for epigenetic transcriptional activation. Involved in epithelial to mesenchymal transition (EMT) via interaction with SNAI1 and participates in repression of E-cadherin, probably by mediating deamination of histone H3. Also involved in E-cadherin repression following hypoxia, a hallmark of epithelial to mesenchymal transition believed to amplify tumor aggressiveness, suggesting that it may play a role in tumor progression. Acts as a regulator of chondrocyte differentiation, probably by regulating expression of factors that control chondrocyte differentiation. [UniProt]
Calculated Mw	87 kDa
PTM	<p>The lysine tyrosylquinone cross-link (LTQ) is generated by condensation of the epsilon-amino group of a lysine with a topaquinone produced by oxidation of tyrosine.</p> <p>N-glycosylated. N-glycosylation on Asn-455 and Asn-644 may be essential for proper folding and secretion; may be composed of a fucosylated carbohydrates attached to a trimannose N-linked glycan core. [UniProt]</p>
Cellular Localization	Secreted, extracellular space, extracellular matrix, basement membrane. Nucleus. Chromosome. Associated with chromatin. It is unclear how LOXL2 is nuclear: it contains a clear signal sequence and is predicted to localize in the extracellular medium. However, different reports confirmed the intracellular location and its key role in transcription regulation. [UniProt]

Images



ARG58833 anti-LOXL2 antibody WB image

Western blot: 50 µg of Mouse testis, 50 µg of Rat ovary, 50 µg of Human placenta, 40 µg of HeLa, 40 µg of 22RV1 and 40 µg of MCF-7 lysates stained with ARG58833 anti-LOXL2 antibody at 0.5 µg/ml dilution.