

Rabbit Anti-LOXL2 Polyclonal: RC0322, RC0322RTU7

Intended Use: For Research Use Only

Description: Lysyl oxidase (LOX) proteins belong to a family of enzymes that oxidize primary amine substrated to reactive aldehydes. LOX is involved in tumor suppression, cell motility, cellular senescence and developmental regulation. There are four homologs of LOX, lysyl oxidase-like proteins, designated LOX-like proteins (LOXL1-4). LOXL2 is an extracellular protein that localizes specifically to sites of elastogenesis. It serves as a cross-linking enzyme, controlling the deposition of elastin and interacts with Fibulin-5. LOXL2 and LOXL3 can interact and cooperate with the Snail protein to downregulate E-cadherin expression. Overexpression of LOXL2 has been reported in a number of cancers and its ability to promote epithelial to mesenchymal transition suggest that it might play a role in tumor progression. Knockdown of the LOXL2 protein significantly decreases tumor growth. Higher expression has been correlated with metastasis and reduced survival in patients with aggressive breast cancer. LOXL2 activity is strongly induced in hypoxia and it is reported to be a direct transcriptional target of HIF1A.

Specifications:

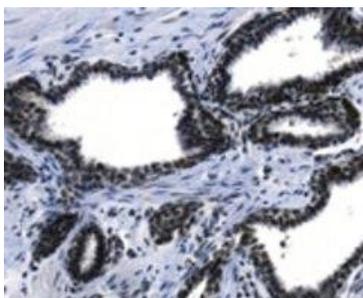
Clone: Polyclonal
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Immunogen: KLH-conjugated linear peptide to 16 amino acids from the N-terminal half of human LOXL2
 Localization: Nucleus, cytoplasm
 Formulation: Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, IP, WB
 Package:

Description	Catalog No.	Size
LOXL2 Concentrated	RC0322	1 ml
LOXL2 Prediluted	RC0322RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Prostate, placenta, ovary, esophageal cancer
 Concentrated Dilution: 20-100
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human prostate stained with anti-LOXL2 using DAB

References:

1. Insights into the biophysical forces between proteins involved in elastic fiber assembly. O'Neill Moore S, et al. J Mater Chem B 8:9239-9250, 2020.
2. Tumor-suppressive microRNA-29 family inhibits cancer cell migration and invasion directly targeting LOXL2 in lung squamous cell carcinoma. Mizuno K, et al. Int J Oncol 48:450-60, 2016.