

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                           |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Lysyl Oxidase Homolog 2/LOXL2 in direct ELISAs and Western blots.                                 |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>2B</sub> Clone # 262418                                                               |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                                                      |
| <b>Immunogen</b>                                                                                                                                                                                        | Mouse myeloma cell line NS0-derived recombinant human Lysyl Oxidase Homolog 2/LOXL2<br>Gln26-Gln744 (predicted) |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                 |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                                    |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                                 |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoprecipitation</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

Lysyl Oxidase Homolog 2 (lysyl oxidase-like protein 2, LOXL2) is a member of lysyl oxidase-like (LOXL) gene family which includes LOXL1 through LOXL4. These enzymes are secreted copper-binding amine oxidases that oxidize primary amine substrates to aldehydes (1). The N-terminal region of LOXL2 contains four scavenger receptor cysteine-rich (SRCR) domains, and the C-terminal region is a catalytic domain similar to other lysyl oxidases (1). The catalytic domain contains conserved residues required for copper binding and formation of a lysyl tyrosylquinone co-factor (2). Although some of the LOXL enzymes are known to cross-link collagen and elastin substrates, such a function has yet to be characterized for LOXL2. It has been shown that LOXL2 promotes cell migration and tumor cell invasiveness (3, 4). Elevated expression of LOXL2 is also associated with cancer progression in various tumors and carcinoma cell lines, which makes it a potential marker for prognosis of cancer (5). LOXL2 is expressed in many tissues, with elevated levels in reproductive tissues such as placenta, uterus, and prostate (6).

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