

Synonym

Lysyl oxidase homolog 2, LOXL2

Source

Human LOXL2, His Tag (LO2-H52H3) is expressed from human 293 cells (HEK293). It contains AA Gln 26 - Gln 774 (Accession # [Q9Y4K0-1](#)).

Predicted N-terminus: Gln 26

Molecular Characterization

LOXL2(Gln 26 - Gln 774)
Q9Y4K0-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 86.0 kDa. The protein migrates as 100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μm filtered solution in 20 mM MES, 50 mM NaCl, pH6.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Storage

Please avoid repeated freeze-thaw cycles.

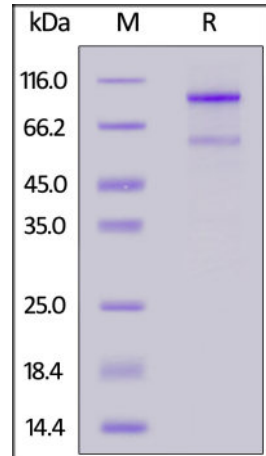
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

Shipping

This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.

SDS-PAGE



Human LOXL2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity

Measured by its ability to produce hydrogen peroxide during the oxidation of benzylamine. The specific activity is >5 pmol/min/ μg (QC tested).

Background

Lysyl oxidase homolog 2 is also known as LOXL2, Lysyl oxidase-like protein 2, which is expressed in many tissues, highest expression in reproductive tissues, placenta, uterus and prostate, Up-regulated in a number of cancers cells and tissues. LOXL2 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. LOXL2 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. LOXL2 acts as a regulator of chondrocyte differentiation, probably by regulating expression of factors that control chondrocyte differentiation.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.