

This product is still under development. Please contact us if you have interest in this product. We will accelerate the development process accordingly and reserve this product for you as request.

Synonym

Lysyl oxidase homolog 2,LOXL2

Source

Biotinylated Human LOXL2, His,Avitag (LO2-H82E3) 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 Avi

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag.

The protein has a calculated MW of 87.8 kDa.

Biotinylation

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Endotoxin

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

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.

References

- (1) [Ota T, et al., 2004, Nat. Genet. 36:40-45.](#)
- (2) [Jourdan-Le Saux C, et al., 1999, J. Biol. Chem. 274:12939-12944.](#)
- (3) [Lugassy J, et al., 2012, J. Biol. Chem. 287:3541-3549.](#)

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