Data Sheet (Cat.No.TMPH-01630)

TargetMol

LOXL3 Protein, Human, Recombinant (GST & His)

General Information

Synonyms:	LOXL;Lysyl oxidase homolog 3;LOXL3;Lysyl oxidase-like protein 3
Protein Construction:	401-608 aa
Species:	Human
Expression Host:	E. coli
Accession:	P58215
Molecular Weight:	55.7 kDa (predicted)
AA Sequence:	DRPLHMLYCAAEENCLASSARSANWPYGHRRLLRFSSQIHNLGRADFRPKAGRHSWVWHECHGHYHSMDI FTHYDILTPNGTKVAEGHKASFCLEDTECQEDVSKRYECANFGEQGITVGCWDLYRHDIDCQWIDITDVKPGN YILQVVINPNFEVAESDFTNNAMKCNCKYDGHRIWVHNCHIGDAFSEEANRRFERYPGQTSNQII

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Protein-lysine 6-oxidase that mediates the oxidation of peptidyl lysine residues to allysine in target proteins. Catalyzes the post-translational oxidative deamination of peptidyl lysine residues in precursors of elastin and

different types of collagens, a prerequisite in the formation of cross-links between collagens and elastin. Required for somite boundary formation by catalyzing oxidation of fibronectin (FN1), enhancing integrin signaling in myofibers and their adhesion to the myotendinous junction (MTJ). Acts as a regulator of inflammatory response by inhibiting differentiation of naive CD4(+) T-cells into T-helper Th17 or regulatory T-cells (Treg): acts by interacting with STAT3 in the nucleus and catalyzing both deacetylation and oxidation of lysine residues on STAT3, leading to disrupt STAT3 dimerization and inhibit STAT3 transcription activity. Oxidation of lysine residues to allysine on STAT3 preferentially takes place on lysine residues that are acetylated. Also able to catalyze deacetylation of lysine residues on STAT3.; Shows protein-lysine 6-oxidase activity toward elastin and different types of collagens, with the highest activity toward collagen type VIII.; Shows protein-lysine 6-oxidase activity toward elastin and different types of collagens, with the highest activity toward collagen type IV.

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