Data Sheet (Cat.No.TMPY-00203)

TargetMol

LOXL2 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	1110004B06Rik;4930526G11Rik;9430067E15Rik;lysyl oxidase-like 2
Protein Construction:	A DNA sequence encoding the mouse Loxl2 (NP_201582.2) (Met1-Gln776) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Gln 26
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	P58022-1
Molecular Weight:	85.9 kDa (predicted)

QC Testing

Biological Activity:	Measured by its ability to produce hydrogen peroxide during the oxidation of benzylamine. The specific activity is > 3pmoles/min/μg.
Purity:	> 80 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM MES, 150 mM NaCl, pH 6. 5. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. 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

Lysyl oxidase homolog 2, also known as Lysyl oxidase-like protein 2, Lysyl oxidase-related protein 2, Lysyl oxidase-related protein WS9-14 and LOXL2, is a secreted protein that belongs to the lysyl oxidase family. LOXL2 contains four SRCR domains. The lysyl oxidase family is made up of five members: lysyl oxidase (LOX) and lysyl oxidase-like 1-4 (LOXL1, LOXL2, LOXL3, LOXL4). All members share conserved C-terminal catalytic domains that provide for lysyl oxidase or lysyl oxidase-like enzyme activity; and more divergent propeptide regions. LOX family

enzyme activities catalyze the final enzymatic conversion required for the formation of normal biosynthetic collagen and elastin cross-links. LOXL2 is expressed by pre-hypertrophic and hypertrophic chondrocytes in vivo, and that LOXL2 expression is regulated in vitro as a function of chondrocyte differentiation. LOXL2 promotes chondrocyte differentiation by mechanisms that are likely to include roles as both a regulator and an effector of chondrocyte differentiation. LOXL2 expression could also be explored as a molecular target in the prevention of breast cancer progression.

Reference

Peng,L. et al., 2009, Carcinogenesis. 30 (10):1660-9.
Hollosi,P. et al., 2009, Int J Cancer. 125 (2):318-27.
Rückert,F. et al., 2010, Int J Colorectal Dis. 25 (3):303-11.Iftikhar,M. et al., 2011, J Biol Chem. 286 (2):909-18.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481