

## Product Information

### MemDX™ Membrane Protein Human PLOD1 (Procollagen-lysine,2-oxoglutarate 5-dioxygenase 1) for Antibody Discovery

Cat. No.: **MP1028X**

This product is for research use only and is not intended for diagnostic use.

This product is a 109.9 kDa Human PLOD1 membrane protein expressed in *in vitro* wheat germ expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

#### Product Specifications

##### Host Species

Human

##### Target Protein

PLOD1

##### Protein Length

Full-length

##### Molecular Weight

109.9 kDa

##### Sequence

MRPLLLLALLGWLLLAELAKGDAKPEDNLLVLTVAETKETEGFRRFKRSAQFFNYKIQLGLGEDWNVEKGTSAGGGQKVRLLKKALE

#### Product Description

##### Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

##### Expression Systems

*in vitro* wheat germ expression system

##### Tag

GST-tag at N-terminal

##### Form

Liquid

##### Purification

Glutathione Sepharose 4 Fast Flow

##### Buffer

50 mM Tris-HCl, 150 mM NaCl, 0.05% Brij35, 1 mM DTT, 10% glycerol, pH7.5

### Storage

Store at +4°C for up to one week or several months at -80°C

### Target

#### Target Protein

PLOD1

#### Full Name

Procollagen-lysine,2-oxoglutarate 5-dioxygenase 1

#### Introduction

Lysyl hydroxylase is a membrane-bound homodimeric protein localized to the cisternae of the endoplasmic reticulum. The enzyme (cofactors iron and ascorbate) catalyzes the hydroxylation of lysyl residues in collagen-like peptides. The resultant hydroxylysyl groups are attachment sites for carbohydrates in collagen and thus are critical for the stability of intermolecular crosslinks. Some patients with Ehlers-Danlos syndrome type VI have deficiencies in lysyl hydroxylase activity. Two transcript variants encoding different isoforms have been found for this gene.

#### Alternative Names

LH; LH1; LLH; EDS6; PLOD; EDSKCL1; procollagen-lysine,2-oxoglutarate 5-dioxygenase 1; lysine hydroxylase; lysyl hydroxylase 1; procollagen-lysine 1, 2-oxoglutarate 5-dioxygenase 1

#### Gene ID

[5351](#)

#### UniProt ID

[Q02809](#)