

PLOD1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP12656c**Specification**

PLOD1 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [Q02809](#)**PLOD1 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 5351**Other Names**

Procollagen-lysine, 2-oxoglutarate 5-dioxygenase 1, Lysyl hydroxylase 1, LH1, PLOD1, LLH, PLOD

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PLOD1 Antibody (N-term) Blocking peptide - Protein Information**Name** PLOD1**Synonyms** LLH, PLOD**Function**

Part of a complex composed of PLOD1, P3H3 and P3H4 that catalyzes hydroxylation of lysine residues in collagen alpha chains and is required for normal assembly and cross-linking of collagen fibrils (By similarity). Forms hydroxylysine residues in -Xaa-Lys- Gly- sequences in collagens (PubMed: [8621606](http://www.uniprot.org/citations/8621606), PubMed: [10686424](http://www.uniprot.org/citations/10686424), PubMed: [15854030](http://www.uniprot.org/citations/15854030)). These hydroxylysines serve as sites of attachment for carbohydrate units and are essential for the stability of the intermolecular collagen cross-links (Probable).

Cellular Location

Rough endoplasmic reticulum membrane; Peripheral membrane protein; Luminal side

PLOD1 Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

PLOD1 Antibody (N-term) Blocking peptide - Images

PLOD1 Antibody (N-term) Blocking peptide - Background

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.

PLOD1 Antibody (N-term) Blocking peptide - References

Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) ; Huang, Q.Y., et al. Bone 44(5):984-988(2009) Yamada, Y., et al. Int. J. Mol. Med. 19(5):791-801(2007) Tasker, P.N., et al. Osteoporos Int 17(7):1078-1085(2006) Giunta, C., et al. Mol. Genet. Metab. 86 (1-2), 269-276 (2005) ;