

### PLOD1 Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP12656c

### **Specification**

### PLOD1 Antibody (N-term) Blocking peptide - Product Information

**Primary 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-linkling of collagen fibrils (By similarity). Forms hydroxylysine residues in -Xaa-Lys- Gly- sequences in collagens (PubMed:<a href="http://www.uniprot.org/citations/8621606" target="\_blank">8621606</a>, PubMed:<a href="http://www.uniprot.org/citations/10686424" target="\_blank">10686424</a>, PubMed:<a href="http://www.uniprot.org/citations/15854030" target="\_blank">15854030</a>). 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; Lumenal 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 proteinlocalized to the cisternae of the endoplasmic reticulum. The enzyme(cofactors iron and ascorbate) catalyzes the hydroxylation of lysylresidues in collagen-like peptides. The resultant hydroxylysylgroups are attachment sites for carbohydrates in collagen and thusare critical for the stability of intermolecular crosslinks. Somepatients with Ehlers-Danlos syndrome type VI have deficiencies inlysyl 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) :