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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:8621606, PubMed:10686424, PubMed: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; Lumenal side

PLOD1 Antibody (N-term) Blocking peptide - Protocols

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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) :