Best Tools for immunology Research

PLOD1 rabbit pAb

Catalog No :	YT7412
Reactivity :	Human;Mouse;Rat
Applications :	WB;ELISA;IHC
Target :	PLOD1
Fields :	>>Lysine degradation;>>Metabolic pathways
Gene Name :	PLOD1 LLH PLOD
Protein Name :	PLOD1
Human Gene Id :	5351
Human Swiss Prot No :	Q02809
Mouse Gene Id :	18822
Mouse Swiss Prot No :	Q9R0E2
Rat Swiss Prot No :	Q63321
Immunogen :	Synthesized peptide derived from human PLOD1 AA range: 551-601
Specificity :	This antibody detects endogenous levels of PLOD1 at Human/Mouse/Rat
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

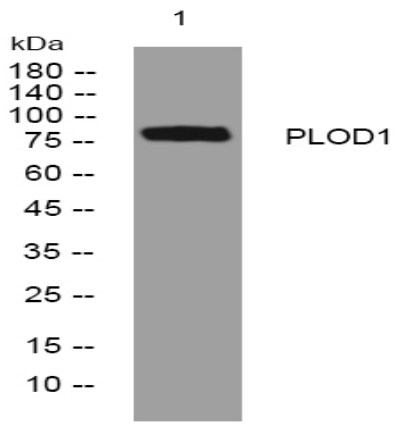
Molecularweight : 80kD

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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015],

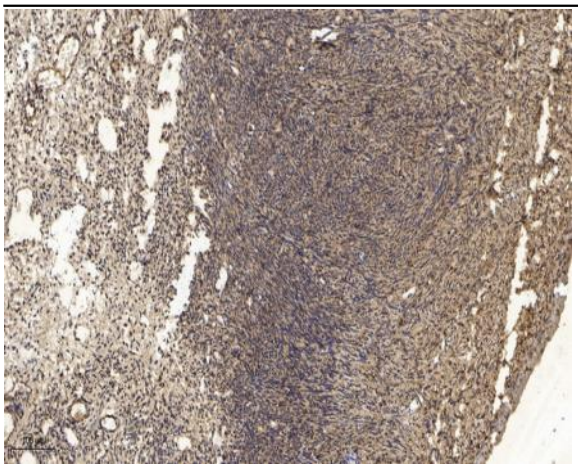
Function : catalytic activity:Procollagen L-lysine + 2-oxoglutarate + O(2) = procollagen 5-hydroxy-L-lysine + succinate + CO(2).,cofactor:Ascorbate.,cofactor:Iron.,disease:Defects in PLOD1 are the cause of Ehlers-Danlos syndrome type 6 (EDS6) [MIM:225400]. EDS is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS6 is characterized by the presence of ocular complications, particularly retinal detachment.,disease:Defects in PLOD1 are the cause of Nevo syndrome [MIM:601451]. This is a rare, autosomal recessive disorder characterized by increased perinatal length, kyphosis, muscular hypotonia, and joint laxity. Nevo syndrome and EDS-VI have similar clinical phenotypes. Some authors consider that both syndromes are the same clinical entity.,function:Forms hydroxylysine residues in -Xaa-Lys-Gly- sequences in coll

Subcellular Location : Rough endoplasmic reticulum membrane; Peripheral membrane protein; Lumenal side.

Products Images



Western blot analysis of lysates from HEK293 cells, primary antibody was diluted at 1:1000, 4°over night



Immunohistochemical analysis of paraffin-embedded human oophoroma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).