Anti-PLOD2 Antibody

Description	The protein encoded by this gene is a membrane-bound homodimeric enzyme that is localized to the cisternae of the rough 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 VIB have deficiencies in lysyl hydroxylase activity. Mutations in the coding region of this gene are associated with Bruck syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms.
Model	STJ115980
Host	Rabbit
Reactivity	Human
Applications	IF
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 470-650 of human PLOD2 (NP_891988.1).
Gene ID	5352
Gene Symbol	PLOD2
Dilution range	IF 1:50 - 1:100
Tissue Specificity	Highly expressed in pancreas and muscle, Isoform 1 and isoform 2 are expressed in the majority of the examined cell types, Isoform 2 is specifically expressed in skin, lung, dura and aorta
Purification	Affinity purification

Note	For Research Use Only (RUO).
Protein Name	Procollagen-lysine,2-oxoglutarate 5-dioxygenase 2
Molecular Weight	84.686 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:9082OMIM:601865Reactome:R-HSA-1650814
Alternative Names	Procollagen-lysine,2-oxoglutarate 5-dioxygenase 2
Function	Forms hydroxylysine residues in -Xaa-Lys-Gly- sequences in collagens, These hydroxylysines serve as sites of attachment for carbohydrate units and are essential for the stability of the intermolecular collagen cross-links,
Cellular Localization	Rough endoplasmic reticulum membrane