Mouse Procollagen-lysine,2-oxoglutarate 5-dioxygenase 2 (PLOD2) ELISA Kit

Catalog No: #EK8430

Package Size: #EK8430-1 48T #EK8430-2 96T

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Description

Product Name	Mouse Procollagen-lysine,2-oxoglutarate 5-dioxygenase 2 (PLOD2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	LH2; TLH; lysine hydroxylase 2|lysyl hydroxylase 2|telopeptide lysyl hydroxylase
Accession No.	Q9R0B9
Uniprot	Q9R0B9
GeneID	26432;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.057 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate PLOD2 in samples. An antibody specific for PLOD2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPLOD2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PLOD2 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PLOD2 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:PLOD2 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. The similarity is even higher in the C-terminal region of the polypeptides. The PLOD2 gene contains 9 cysteines conserved in PLOD, in addition to conserved histidines in the putative active site.

Note: This product is for in vitro research use only