Product Datasheet

Human Procollagen-lysine,2-oxoglutarate 5-dioxygenase 3 (PLOD3) ELISA Kit



Catalog No: #EK11178

Package Size: #EK11178-1 48T #EK11178-2 96T

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	
Product Name	Human Procollagen-lysine,2-oxoglutarate 5-dioxygenase 3 (PLOD3) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	LH3; lysine hydroxylase 3 lysyl hydroxylase 3
Accession No.	O60568
Uniprot	O60568
GeneID	8985;
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:0.312-20 ng/mL	
Sensitivity:0.106 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 PLOD3 in samples. An antibody specific for PLOD3 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPLOD3 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PLOD3 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 PLOD3 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:The LH3 cDNA clones encode a 738-amino acid polypeptide, including a signal peptide of 24 residues. The overall amino acid sequence identity between the processed human PLOD3 and PLOD1 polypeptides is 59%, and that between the processed PLOD3 and PLOD2 polypeptide is only 45%. All 4 critical residues at the catalytic site, 2 histidines, 1 aspartate, and 1 arginine, are conserved in all of these polypeptides. The mRNA for PLOD3 was found to be expressed in a variety of tissues, but distinct differences appeared to exist in the expression pattern of the 3 isoenzyme mRNAs. Recombinant PLOD3 expressed in insect cells by means of a baculovirus vector was found to be more soluble than PLOD1 expressed in the same cell type.

Note: This product is for in vitro research use only