Human Phosphatidate phosphatase LPIN1 (LPIN1) ELISA Kit

Catalog No: #EK10053

Package Size: #EK10053-1 48T #EK10053-2 96T

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Description

Product Name	Human Phosphatidate phosphatase LPIN1 (LPIN1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	DKFZp781P1796; KIAA0188; PAP1;
Accession No.	Q14693
Uniprot	Q14693
GeneID	23175;
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:6.25-100 ng/mL

Sensitivity:2.43 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 LPIN1 in samples. An antibody specific for LPIN1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyLPIN1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for LPIN1 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 LPIN1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Lipin-1 has phosphatidate phosphatase activity.This gene represents a candidate gene for human lipodystrophy, characterized by loss of body fat, fatty liver, hypertriglyceridemia, and insulin resistance. Mouse studies suggest that this gene functions during normal adipose tissue development and may also play a role in human triglyceride metabolism.

Database analysis identified the human LPIN1 gene, as well as the human and mouse LPIN2 and LPIN3 genes. Consistent with the observed reduction of adipose tissue mass in fld mice, wildtype Lpin1 mRNA was expressed at high levels in adipose tissue and was induced during differentiation of 3T3-L2 preadipocytes. The results indicated that lipin is required for normal adipose tissue development, and provided a candidate gene for human lipodystrophy.

Note: This product is for in vitro research use only