

## Rat Perilipin-1 (Plin1/Peri/Plin) ELISA Kit

Catalog No: #EK11463



Package Size: #EK11463-1 48T #EK11463-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	Rat Perilipin-1 (Plin1/Peri/Plin) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	PERI; PLIN; lipid droplet-associated protein
Accession No.	Q9TUM6
Uniprot	Q9TUM6
GeneID	280981;
Storage	<p>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.</p> <p>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).</p>

## Application Details

Detect Range:Request Information

Sensitivity:Request Information

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 Plin1/Peri/Plin in samples. An antibody specific for Plin1/Peri/Plin has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPlin1/Peri/Plin present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for Plin1/Peri/Plin 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 Plin1/Peri/Plin bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Perilipin is a protein that coats lipid droplets in adipocytes, the fat-storing cells in adipose tissue. Perilipin acts as a protective coating from the bodys natural lipases, such as hormone-sensitive lipase,which break triglycerides into glycerol and free fatty acids for use in metabolism, a process called lipolysis.

Perilipin is hyperphosphorylated by PKA following  $\beta$ -adrenergic receptor activation. Phosphorylated perilipin changes conformation, exposing the stored lipids to hormone-sensitive lipase-mediated lipolysis. Although PKA also phosphorylates hormone-sensitive lipase, which can increase PKA activity, the more than 50-fold increase in fat mobilization (triggered by epinephrine) is primarily due to perilipin phosphorylation.

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Note: This product is for in vitro research use only