

# Human Patatin-like phospholipase domain-containing protein 3 (PNPLA3/ADPN/C22orf20) ELISA Kit



Catalog No: #EK8400

Orders: order@signalwayantibody.com

Package Size: #EK8400-1 48T #EK8400-2 96T

Support: tech@signalwayantibody.com

## Description

Product Name	Human Patatin-like phospholipase domain-containing protein 3 (PNPLA3/ADPN/C22orf20) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	RP4-796117.1; ADPN; C22orf20; iPLA(2)epsilon; adiponutrin
Accession No.	Q9NST1
Uniprot	Q9NST1
GeneID	80339;
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:0.156-10 ng/mL

Sensitivity:0.055 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 PNPLA3 in samples. An antibody specific for PNPLA3 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPNPLA3 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PNPLA3 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 PNPLA3 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**PNPLA3 is a triacylglycerol lipase that mediates triacylglycerol hydrolysis in adipocytes. The encoded protein, which appears to be membrane bound, may be involved in the balance of energy usage/storage in adipocytes. The glucose-induced increase in Adpn expression could be countered by agents known to raise intracellular cAMP. In vivo, Adpn mRNA was high in white and brown adipose tissue from fed mice, but it dropped to barely detectable levels after 19 hours of fast. Refeeding for 8 hours reversed the drop in Adpn mRNA. Fas and Srebp1c mRNA exhibited a similar pattern of expression. Just after a feeding period, Zucker fa/fa obese rats showed 30- to 50-fold elevation of Adpn mRNA relative to congenic lean controls.

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Note: This product is for in vitro research use only