

Mouse Serine/threonine-protein phosphatase PP1-alpha catalytic subunit (PPP1CA) ELISA Kit

Catalog No: #EK8364

Orders: order@signalwayantibody.com

Package Size: #EK8364-1 48T #EK8364-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Mouse Serine/threonine-protein phosphatase PP1-alpha catalytic subunit (PPP1CA) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (<i>Mus musculus</i>)
Other Names	MGC15877; MGC1674; PP-1A; PPP1A; protein phosphatase 1; catalytic subunit; alpha serine/threonine protein phosphatase PP1-alpha 1 catalytic subunit
Accession No.	P62137
Uniprot	P62137
GeneID	19045;
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:25-1600 pg/mL

Sensitivity:6.25 pg/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:Sandwich Test principle:This assay employs a two-site sandwich ELISA to quantitate PPP1CA in samples. An antibody specific for PPP1CA has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any PPP1CA present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PPP1CA 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 PPP1CA bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:Serine/threonine-protein phosphatase PP1-alpha catalytic subunit is one of the three catalytic subunits of protein phosphatase 1 (PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Increased PP1 activity has been observed in the end stage of heart failure.

Studies in both human and mice suggest that PP1 is an important regulator of cardiac function. Mouse studies also suggest that PP1 functions as a suppressor of learning and memory. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Note: This product is for in vitro research use only