

Rat CAMP-dependent protein kinase type II-beta regulatory subunit (PRKAR2B) ELISA Kit

Catalog No: #EK8250

Orders: order@signalwayantibody.com

Package Size: #EK8250-1 48T #EK8250-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Rat CAMP-dependent protein kinase type II-beta regulatory subunit (PRKAR2B) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Other Names	PRKAR2; RII-BETA; H_RG363E19.2 WUGSC:H_RG363E19.2 cAMP-dependent protein kinase type II-beta regulatory chain cAMP-dependent protein kinase; regulatory subunit beta 2
Accession No.	P12369
Uniprot	P12369
GeneID	24679;
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:0.054 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 PRKAR2B in samples. An antibody specific for PRKAR2B has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPRKAR2B present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PRKAR2B 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 PRKAR2B bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**The inactive holoenzyme of AMPK is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits of AMPK have been identified in humans. PRKAR2b is one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. This subunit has been shown to interact with and suppress the transcriptional activity of the cAMP responsive element binding protein 1 (CREB1) in activated T cells. Knockout studies in mice suggest that this subunit may play an important role in regulating energy balance and adiposity.

Note: This product is for in vitro research use only