Rat CAMP-dependent protein kinase type I-beta regulatory subunit (PRKAR1B) ELISA Kit

Catalog No: #EK8257

Package Size: #EK8257-1 48T #EK8257-2 96T

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Rat CAMP-dependent protein kinase type I-beta regulatory subunit (PRKAR1B) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	PRKAR1; OTTHUMP00000199948|OTTHUMP00000199949
Accession No.	P81377
Uniprot	P81377
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: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 PRKAR1B in samples. An antibody specific for PRKAR1B has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPRKAR1B present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PRKAR1B 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 PRKAR1B bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Cyclic AMP-dependent protein kinase A (PKA) is an essential enzyme in the signaling pathway of the second messenger cAMP. Through phosphorylation of target proteins, PKA controls many biochemical events in the cell including regulation of metabolism, ion transport, and gene transcription. PRKAR1b is composed of 2 regulatory and 2 catalytic subunits and dissociates from the regulatory subunits upon binding of cAMP.

BAD is required to assemble the complex, the lack of which results in diminished mitochondria-based glucokinase activity and blunted mitochondrial respiration in response to glucose. Glucose deprivation results in dephosphorylation of BAD, and BAD-dependent cell death.

Note: This product is for in vitro research use only