Datasheet for ABIN6136200

anti-PRKACA antibody (pSer339)

2 Images

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Overview

Quantity:	100 µL
Target:	PRKACA
Binding Specificity:	pSer339
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PRKACA antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP)

Product Details

Immunogen:	A synthetic phosphorylated peptide around S339 of human PKA C-alpha (PRKACA) (NP_002721.1).
Sequence:	RVSIN
Isotype:	IgG
Cross-Reactivity:	Human
Characteristics:	Phosphorylated Antibodies

Target Details

Target:	PRKACA
Alternative Name:	PRKACA (PRKACA Products)

Target Details

Background:	This gene encodes one of the catalytic subunits of protein kinase A, which exists as a tetrameric holoenzyme with two regulatory subunits and two catalytic subunits, in its inactive form. 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 have been identified in humans. cAMP-dependent phosphorylation of proteins by protein kinase A is important to many cellular processes, including differentiation, proliferation, and apoptosis. Constitutive activation of this gene caused either by somatic mutations, or genomic duplications of regions that include this gene, have been associated with hyperplasias and adenomas of the adrenal cortex and are linked to corticotropin-independent Cushing's syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms. Tissue-specific isoforms that differ at the N-terminus have been described, and these isoforms may differ in the post-translational modifications that occur at the N-terminus of some isoforms.,PRKACA,PKACA,PPNAD4,Cancer,Signal Transduction,G protein signaling,G2/M DNA Damage Checkpoint,Kinase,Serine/threonine kinases,MAPK-Erk Signaling Pathway,Cell Biology & Developmental Biology,Apoptosis,Mitochondrial Control of Apoptosis,Inhibition of Apoptosis,Cell Cycle,Centrosome,Cytoskeleton,Microtubules,Actins,Hedgehog Signaling Pathway,Endocrine & Metabolism,Lipid Metabolism,Carbohydrate metabolism,AMPK Signaling Pathway,Insulin Receptor Signaling Pathway,Immunology & Inflammation,NF-kB Signaling Pathway,Neuroscience,Neurodegenerative Diseases,Dopamine Signaling in Parkinson's Disease,Protein phosphorylation,PRKACA
Molecular Weight:	39 kDa/40 kDa
Gene ID:	5566
UniProt:	P17612
Pathways:	NF-kappaB Signaling, Hedgehog Signaling, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Thyroid Hormone Synthesis, Carbohydrate Homeostasis, Myometrial Relaxation and Contraction, M Phase, G-protein mediated Events, Signaling Events mediated by VEGFR1 and VEGFR2, Interaction of EGFR with phospholipase C-gamma, Thromboxane A2 Receptor Signaling, VEGFR1 Specific Signals, Lipid Metabolism, SARS-CoV-2 Protein Interactome, The Global Phosphorylation Landscape of SARS-CoV-2 Infection

Application Details

Application Notes:	WB,1:500 - 1:2000,IP,1:50 - 1:100

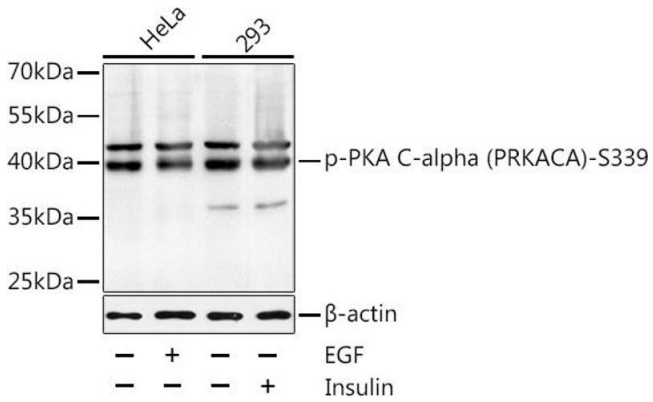
Application Details

Comment:	HIGH QUALITY
Restrictions:	For Research Use only

Handling

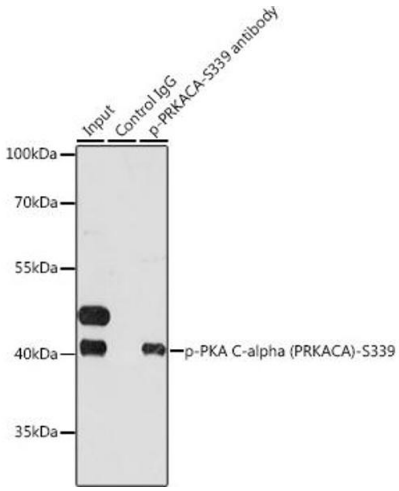
Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of extracts of HeLa and 293 cells, using Phospho-PKA C-alpha (PRKACA)-S339 antibody at 1:1000 dilution. HeLa cells were treated by EGF (100 ng/mL) for 30 minutes after serum-starvation overnight.293T cells were treated by Insulin (100nM) for 10 minutes after serum-starvation overnight.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % BSA.



Immunoprecipitation

Image 2. Immunoprecipitation analysis of 200 µg extracts of HeLa cells, using 3 µg Phospho-PKA C-alpha (PRKACA)-S339 pAb . Western blot was performed from the immunoprecipitate using Phospho-PKA C-alpha (PRKACA)-S339 pAb at a dilition of 1:1000. HeLa cells were treated by EGF (100 ng/mL) at 37 °C for 30 minutes after serum-starvation overnight.