Datasheet for ABIN392680

anti-PRKACA antibody (N-Term, Regulatory Subunit 1)

2 Images

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Overview

Quantity:	400 µL
Target:	PRKACA
Binding Specificity:	AA 1-30, N-Term, Regulatory Subunit 1
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This Protein Kinase A regulatory subunit I alpha antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human Protein Kinase A regulatory subunit I alpha.
Clone:	RB3247
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	PRKACA
Alternative Name:	Protein Kinase A alpha (PRKACA Products)
Background:	CAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its

Target Details

	effects by activating the cAMP-dependent protein kinase (AMPK), which transduces the signal through phosphorylation of different target proteins. 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. PKR1 is one of the regulatory subunits. This protein was found to be a tissue-specific extinguisher that down-regulates the expression of seven liver genes in hepatoma x fibroblast hybrids. Functional null mutations in the gene cause Carney complex (CNC), an autosomal dominant multiple neoplasia syndrome. The gene can fuse to the RET protooncogene by gene rearrangement and form the thyroid tumor-specific chimeric oncogene known as PTC2.
Molecular Weight:	42982
Gene ID:	5573
NCBI Accession:	NP_001263218, NP_001263219, NP_001265362, NP_002725, NP_997636, NP_997637
UniProt:	P10644
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: 1:1000. IHC-P: 1:50~100
Restrictions:	For Research Use only

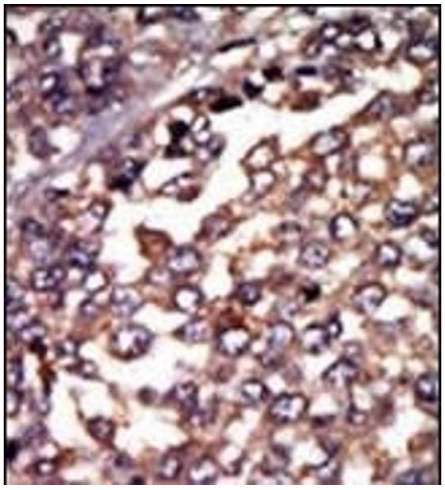
Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

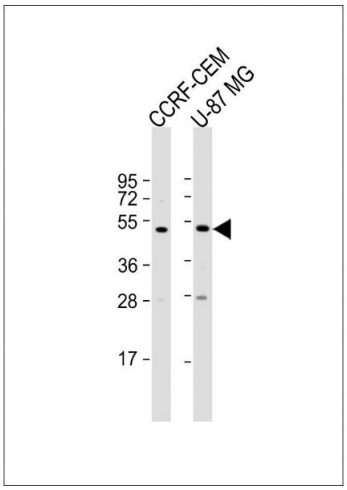
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.
Expiry Date:	6 months

Images



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.



Western Blotting

Image 2. All lanes : Anti-PKR1 Antibody (M1) at 1:1000 dilution Lane 1: CCRF-CEM whole cell lysate Lane 2: U-87 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 43 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.