

Datasheet for ABIN391060

anti-PRKAG3 antibody (AA 148-178)[2 Images](#)[2 Publications](#)[Go to Product page](#)

Overview

Quantity:	400 µL
Target:	PRKAG3
Binding Specificity:	AA 148-178
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PRKAG3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This PRKAG3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 148-178 amino acids from the Central region of human PRKAG3.
Clone:	RB3191
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	PRKAG3
Alternative Name:	PRKAG3 (PRKAG3 Products)

Target Details

Background:	PRKAG3 is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit is one of the gamma regulatory subunits of AMPK. It is dominantly expressed in skeletal muscle. Studies of the pig counterpart suggest that this subunit may play a key role in the regulation of energy metabolism in skeletal muscle.
Molecular Weight:	54258
Gene ID:	53632
NCBI Accession:	NP_059127
UniProt:	Q9UGI9
Pathways:	AMPK Signaling , Cellular Glucan Metabolic Process , Warburg Effect

Application Details

Application Notes:	WB: 1:1000. IHC-P: 1:50~100
Restrictions:	For Research Use only

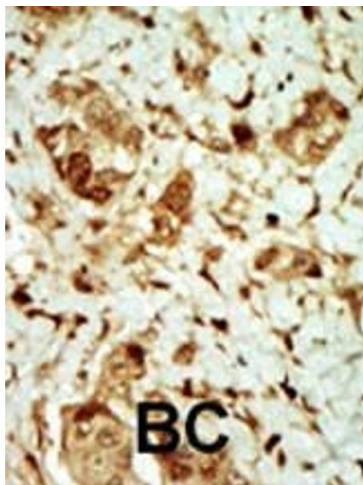
Handling

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.
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

Publications

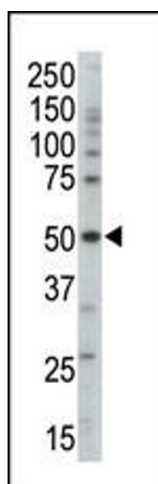
- Product cited in: Murakami, Ito, Hagiwara, Yoshida, Sobue, Ichihara, Takagi, Kojima, Tanaka, Tamiya-Koizumi, Kyogashima, Suzuki, Banno, Nozawa, Murate: "ATRA inhibits ceramide kinase transcription in a human neuroblastoma cell line, SH-SY5Y cells: the role of COUP-TFI." in: **Journal of neurochemistry**, Vol. 112, Issue 2, pp. 511-20, (2010) ([PubMed](#)).
- Yang, Gagarin, St Laurent, Hammell, Toma, Hu, Iwasa, McCaffrey: "Cardiovascular inflammation and lesion cell apoptosis: a novel connection via the interferon-inducible immunoproteasome." in: **Arteriosclerosis, thrombosis, and vascular biology**, Vol. 29, Issue 8, pp. 1213-9, (2009) ([PubMed](#)).
- Hinkovska-Galcheva, Clark, VanWay, Huang, Hiraoka, Abe, Borofsky, Kunkel, Shanley, Shayman, Lanni, Petty, Boxer: "Ceramide kinase promotes Ca²⁺ signaling near IgG-opsonized targets and enhances phagolysosomal fusion in COS-1 cells." in: **Journal of lipid research**, Vol. 49, Issue 3, pp. 531-42, (2008) ([PubMed](#)).

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 DAB 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. Western blot analysis of anti-PRKAG3 Pab (ABIN391060 and ABIN2841215) in mouse brain tissue lysate. PRKAG3 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.