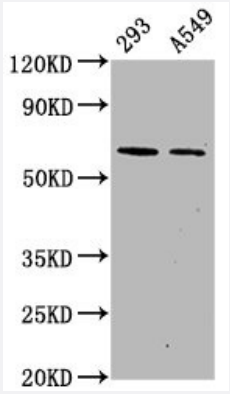
RecomAb™ Sm Size

PRKAA2 (phospho S491) recombinant monoclonal antibody, clone 3H10

Catalog # RAB08142 Size 50 uL

Applications



Western Blot

Western blot analysis of
Lane 1:293 whole cell lysate and
Lane 2: A549 whole cell lysate with PRKAA2 (phospho S491) recombinant monoclonal antibody.

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PRKAA2.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic phosphopeptide corresponding to residues surroundin g S491 of human PRKAA2.
Theoretical MW (kDa)	Calculated MW: 62 kD
Reactivity	Human
Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Affinity chromatography
Isotype	IgG

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Recommend Usage	ELISA Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150 mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20 °C or -80 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot

Western blot analysis of
Lane 1:293 whole cell lysate and
Lane 2: A549 whole cell lysate with PRKAA2 (phospho S491) recombinant monoclonal antibody.

Gene Info — PRKAA2

Entrez GeneID	5563
Protein Accession#	P54646
Gene Name	PRKAA2
Gene Alias	AMPK, AMPK2, PRKAA
Gene Description	protein kinase, AMP-activated, alpha 2 catalytic subunit
Omim ID	600497
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMP K). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and ga mma 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 inacti vates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMG CR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. Studie s of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensit ivity and is necessary for maintaining myocardial energy homeostasis during ischemia. [provided by RefSeq

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Other Designations	5'-AMP-activated protein kinase, catalytic alpha-2 chain|AMP-activated protein kinase alpha 2 catalytic subunit|AMPK-alpha-2 chain|OTTHUMP00000009993

Pathway

- Adipocytokine signaling pathway
- Hypertrophic cardiomyopathy (HCM)
- Insulin signaling pathway
- mTOR signaling pathway
- Regulation of autophagy

Disease

- Atherosclerosis
- Calcinosis
- Cardiovascular Diseases
- Coronary Artery Disease
- Diabetes Mellitus
- Drug Toxicity
- Edema
- Genetic Predisposition to Disease
- Hypercholesterolemia
- Insulin Resistance

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