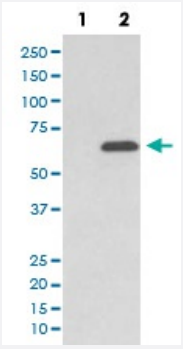
PRKAA2 (phospho S345) monoclonal antibody, clone HFA-16

Catalog # MAB20329 Size 100 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of PRKAA2 (phospho S345) expression in (1) 293T cell lysate treated with Lambda Phosphatase; (2) 293T cell lysate.

Specification

Product Description	Rabbit monoclonal antibody raised against synthetic phosphopeptide of human PRKAA2.
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding S345 of human PRKAA2.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Western Blot (1:1000-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150 mM NaCl, pH 7.4 (50% glycerol, 0.4-0.5 mg/mL BSA, 0.02% sodium azide).
Storage Instruction	Store at -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and st ored frozen at -20°C for a longer time. 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

- Western Blot (Cell lysate)

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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
Other Designations	5'-AMP-activated protein kinase, catalytic alpha-2 chain|AMP-activated protein kinase alpha 2 ca talytic 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