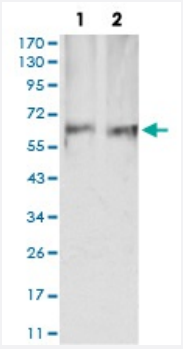
PRKAA2 monoclonal antibody, clone 8E11H5

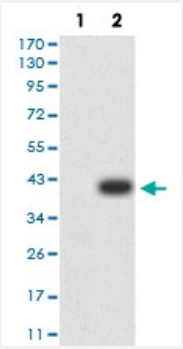
Catalog # MAB17500 Size 100 ug

Applications



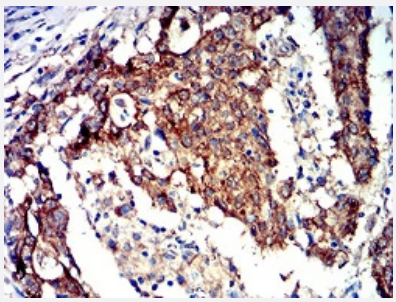
Western Blot (Cell lysate)

Western blot analysis of (1) HEK293 cell, (2) COS7 cell with PRKAA2 monoclonal antibody.



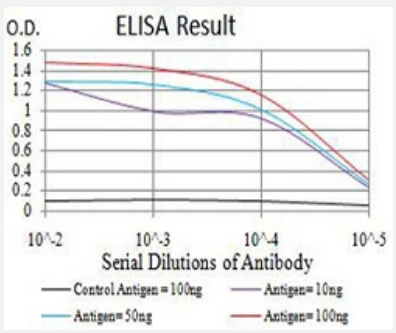
Western Blot (Transfected lysate)

Western blot analysis of (1) HEK293 cells, (2) PRKAA2-hIgGFc transfected HEK293 cell lysate.



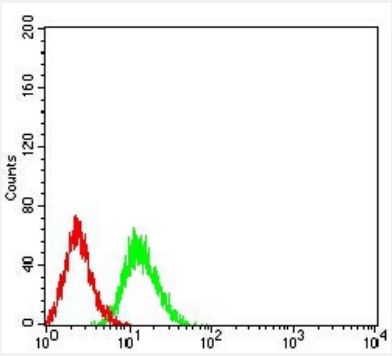
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded stomach cancer tissues with PRKAA2 monoclonal antibody.



Enzyme-linked Immunoabsorbent Assay

ELISA analysis of PRKAA2 monoclonal antibody, clone 8E11H5.



Flow Cytometry

Flow cytometric analysis of Jurkat cells with PRKAA2 monoclonal antibody (green) and negative control (red).

Specification

Product Description	Mouse monoclonal antibody raised against recombinant human PRKAA2.
Immunogen	Recombinant protein corresponding to amino acid 453-552 of human PRKAA2 from *E. coli*.
Host	Mouse
Theoretical MW (kDa)	62.3
Reactivity	Human, Monkey
Form	Liquid
Isotype	IgG1
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunocytochemistry Flow Cytometry (1:200-1:400) Immunohistochemistry (1:200-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide).
Storage Instruction	Store at 4°C. For long term storage store at -20°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.

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- Western Blot (Transfected lysate)

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- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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- Enzyme-linked Immunoabsorbent Assay

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  Flow cytometric analysis of Jurkat cells with PRKAA2 monoclonal antibody (green) and negative control (red).

Gene Info — PRKAA2

Entrez GeneID	5563
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 (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. Studies of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensitivity 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 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