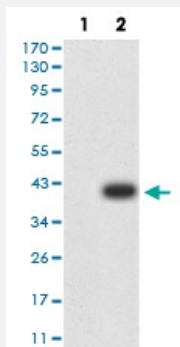


PRKAA2 monoclonal antibody, clone 5B4G1

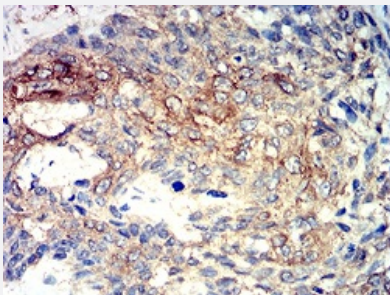
Catalog # MAB17501 Size 100 ug

Applications



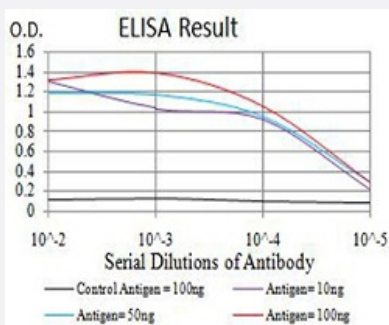
Western Blot (Transfected lysate)

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



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

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



Enzyme-linked Immunoabsorbent Assay

ELISA analysis of PRKAA2 monoclonal antibody, clone 5B4G1.

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
Form	Liquid
Isotype	IgG1
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunocytochemistry Flow Cytometry 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 should be handled by trained staff only.

Applications

- Western Blot (Transfected lysate)

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

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

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

- Enzyme-linked Immunoabsorbent Assay

ELISA analysis of PRKAA2 monoclonal antibody, clone 5B4G1.

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 (AMP K). 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 (HMG CR), 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](#)