
Product Name: PRKAA2 Mouse Monoclonal Antibody**Catalog #: AMM81833**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	IHC,ELISA
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	IHC 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight	62.3kDa

Antigen Information

Gene Name	PRKAA2
Alternative Names	AMPK; AMPK2; PRKAA; AMPKa2
Gene ID	5563.0
SwissProt ID	P54646
Immunogen	Purified recombinant fragment of human PRKAA2 (AA: 453-552) expressed in E. Coli.

Background

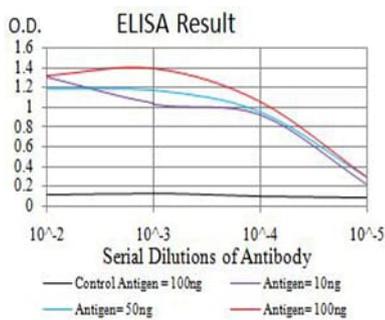
The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response 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.

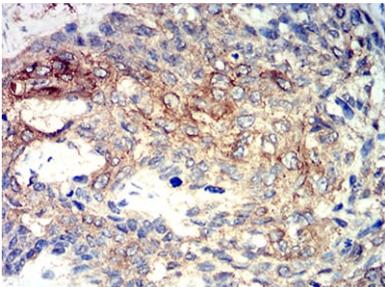
Research Area

Autophagy, Wnt signaling pathway, PI3K-Akt signaling pathway

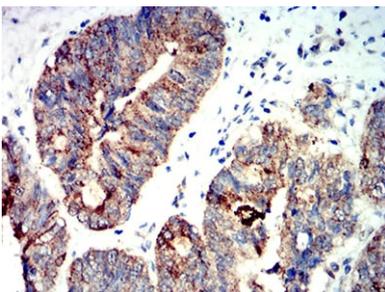
Image Data



Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



Immunohistochemical analysis of paraffin-embedded human esophageal cancer tissues using PRKAA2 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human rectum cancer tissues using PRKAA2 mouse mAb with DAB staining.