

AMPK α 1 (ANT0065R) Rabbit mAb

CatalogNo: ANT8099 **Recombinant** 

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species

- Rabbit
- Human,Mouse,Rat,

Reactivity

- WB,IHC,IF,IP,ELISA

Applications

MW

- 64kD (Calculated)
 - IgG,Kappa
- 64kD (Observed)

Isotype

Recommended Dilution Ratios

IHC 1:100-200

WB 1:1000-5000

IF 1:200-1000

ELISA 1:5000-20000

IP 1:50-200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

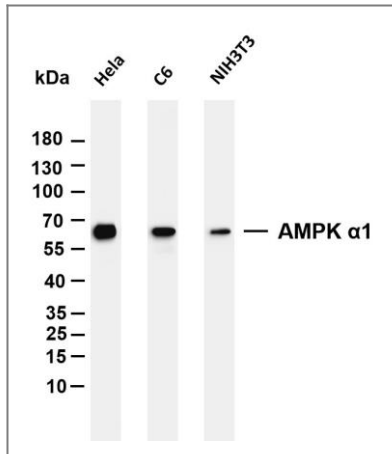
Clone Number ANT0065R

Target Information

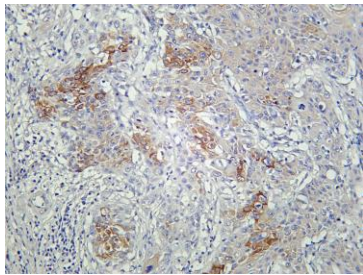
Endogenous

Gene name	PRKAA1		
Protein Name	5'-AMP-activated protein kinase catalytic subunit alpha-1 (AMPK subunit alpha-1) (AcetylCoA carboxylase kinase) (ACACA kinase) (Hydroxymethylglutaryl-CoA reductase kinase) (HMGCR kinase) (Tau-protein kinase PRK)		
	Organism	Gene ID	UniProt ID
	Human	5562 ;	Q13131 ;
	Mouse		Q5EG47 ;
	Rat		P54645 ;
Cellular Localization	Cytoplasm		
Tissue specificity	Brain,Intestine,Liver,Mammary gland,Platelet,Testis		
Function	Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Binding of AMP results in allosteric activation, inducing phosphorylation on Thr-174 by STK11 in complex with STE20-related adapter-alpha (STRAD alpha) pseudo kinase and CAB39. Also activated by phosphorylation by CAMKK2 triggered by a rise in intracellular calcium ions, without detectable changes in the AMP/ATP ratio.,Function:Responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It also regulates cholesterol synthesis via phosphorylation and inactivation of hormone-sensitive lipase and hydroxymethylglutaryl-CoA reductase. Appears to act as a metabolic stress-sensing protein kinase switching off biosynthetic pathways when cellular ATP levels are depleted and when 5'-AMP rises in response to fuel limitation and/or hypoxia. This is a catalytic subunit.,sequence Caution:Translation N-terminally shortened.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Heterotrimer of an alpha catalytic subunit, a beta and a gamma non-catalytic subunits. Interacts with FNIP1 and FNIP2.,		

Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-AMPK α 1 (ANT0065R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: C6 Lane 3: NIH3T3 Predicted band size: 64kDa Observed band size: 64kDa



Human cervical carcinoma was stained with Anti-AMPK α 1 (PT0165R) rabbit antibody

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