AMPK alpha 1 Rabbit mAb

Catalog No: #48827

Package Size: #48827-1 50ul #48827-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

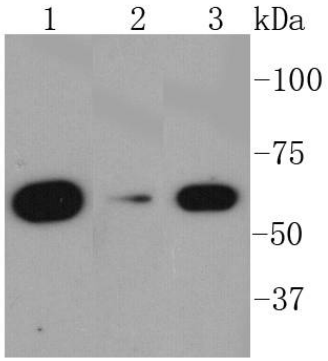
Description

Product Name	AMPK alpha 1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SU03-48
Purification	ProA affinity purified
Applications	WB, ICC/IF, IP, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	5 AMP activated protein kinase alpha 1catalytic subunit antibody 5 AMP activated protein kinase catalytic alpha 1 chain antibody 5' AMP activated protein kinase catalytic subunit alpha 1 antibody 5'-AMP-activated protein kinase catalytic subunit alpha-1 antibody AAPK1 antibody AAPK1_HUMAN antibody ACACA kinase antibody acetyl CoA carboxylase kinase antibody AI194361 antibody AI450832 antibody AL024255 antibody AMP -activate kinase alpha 1 subunit antibody AMP-activated protein kinase, catalytic, alpha -1 antibody AMPK 1 antibody AMPK alpha 1 antibody AMPK alpha 1 chain antibody AMPK antibody AMPK subunit alpha-1 antibody AMPK1 antibody AMPKa1 antibody AMPKalpha1 antibody C130083N04Rik antibody cb116 antibody EC 2.7.11.1 antibody HMG CoA reductase kinase antibody HMGCR kinase antibody hormone sensitive lipase kinase antibody Hydroxymethylglutaryl CoA reductase kinase antibody im:7154392 antibody kinase AMPK alpha1 antibody MGC33776 antibody MGC57364 antibody OTTHUMP00000161795 antibody OTTHUMP00000161796 antibody PRKAA 1 antibody PRKAA1 antibody Protein kinase AMP activated alpha 1 catalytic subunit antibody SNF1-like protein AMPK antibody SNF1A antibody Tau protein kinase PRKAA1 antibody wu:fa94c10 antibody
Accession No.	Swiss-Prot#:Q13131
Uniprot	Q13131
GeneID	5562;
Calculated MW	63 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

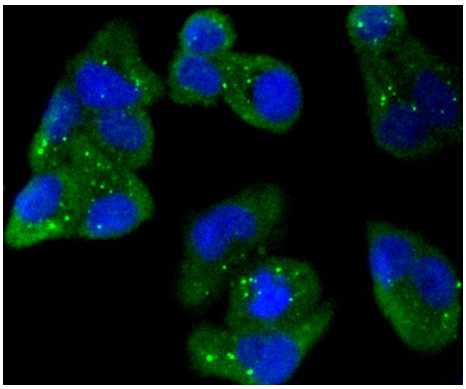
Application Details

WB: 1:1,000-5,000ICC: 1:50-1:200 FC: 1:50-1:100

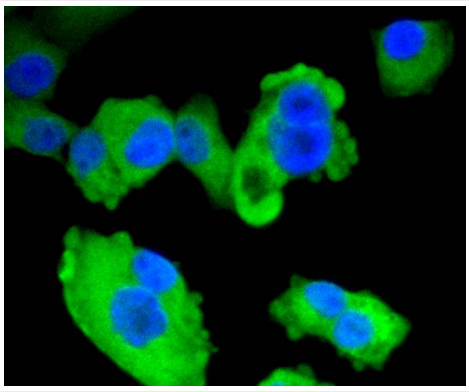
Images



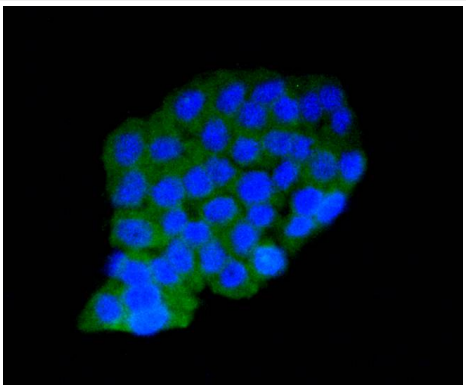
Western blot analysis of AMPK alpha 1 on different lysates using anti-AMPK alpha 1 antibody at 1/1,000 dilution. Positive control: Lane 1: Hela Lane 2: HepG2 Lane 3: MCF-7



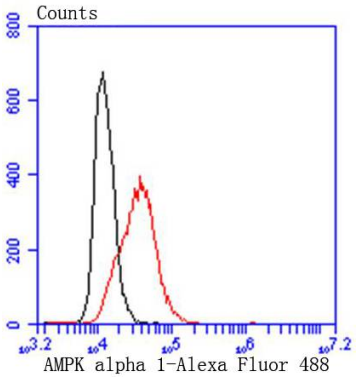
ICC staining AMPK alpha 1 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining AMPK alpha 1 in PANC-1 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining AMPK alpha 1 in PC-12 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Hela cells with AMPK alpha 1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

AMPK (for 5'-AMP-activated protein kinase) is a heterotrimeric complex com-prising a catalytic α subunit and regulatory β and γ subunits. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming bio-synthetic pathways. AMPK is activated by high AMP and low ATP through a mechanism involving allosteric regulation, promotion of phosphorylation by an upstream protein kinase known as AMPK kinase, and inhibition of dephosphorylation. Activated AMPK can phosphorylate and regulate in vivo hydroxy-methylglutaryl-CoA reductase and acetyl-CoA carboxylase, which are key regulatory enzymes of sterol synthesis and fatty acid synthesis, respectively. The human AMPKα1 and AMPKα2 genes encode 548 amino acid and 552 amino acid proteins, respectively. Human AMPKβ1 encodes a 271 amino acid protein and human AMPKβ2 encodes a 272 amino acid protein. The human AMPKγ1 gene encodes a 331 amino acid protein. Human AMPKγ2 and AMPKγ3, which are 569 and 492 amino acid proteins, respectively, contain unique N-terminal domains and may participate directly in the binding of AMP within the AMPK complex.

References

Note: This product is for in vitro research use only