

AMPK beta 1 Rabbit mAb

Catalog No: #49168

Package Size: #49168-1 50ul #49168-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

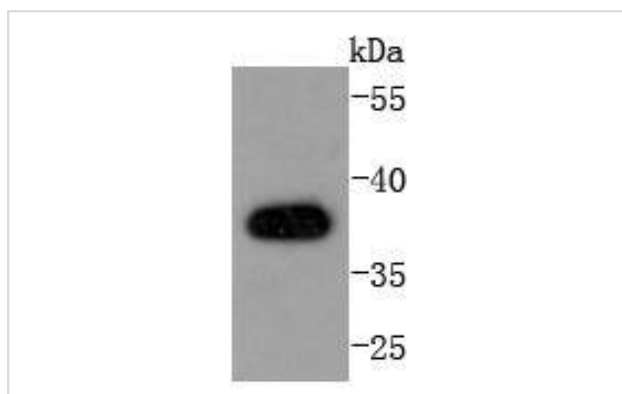
Description

Product Name	AMPK beta 1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SD082-06
Purification	ProA affinity purified
Applications	WB, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	1300015D22Rik antibody 5'-AMP-activated protein kinase subunit beta-1 antibody 5'-AMP-activated protein kinase beta-1 subunit antibody AAKB1_HUMAN antibody AMP-activated protein kinase beta subunit antibody AMP-ACTIVATED PROTEIN KINASE, NONCATALYTIC, BETA-1 antibody AMP-activated, noncatalytic, beta-1 antibody AMPK antibody AMPK beta 1 chain antibody AMPK subunit beta-1 antibody AMPK-BETA-1 antibody AMPKb antibody AU021155 antibody E430008F22 antibody HAMPKb antibody MGC17785 antibody PRKAB1 antibody Protein kinase AMP activated non catalytic subunit beta 1 antibody protein kinase, AMP-activated, beta 1 non-catalytic subunit antibody protein kinase, AMP-activated, noncatalytic, beta-1 antibody
Accession No.	Swiss-Prot#:Q9Y478
Uniprot	Q9Y478
GeneID	5564;
Calculated MW	38 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

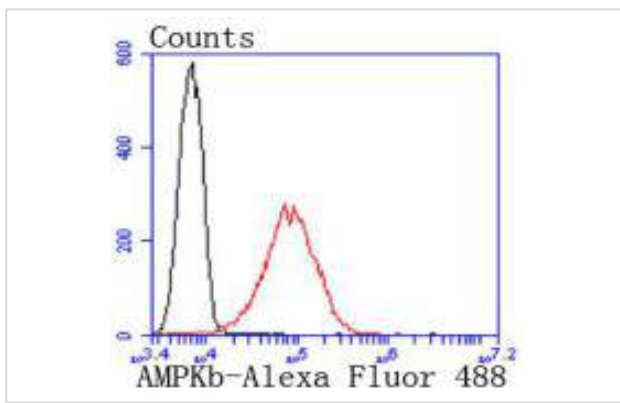
Application Details

WB: 1:1,000-1:2,000 FC: 1:50-1:100

Images



Western blot analysis of AMPK beta 1 on A431 cells lysates using anti-AMPK beta 1 antibody at 1/1,000 dilution.



Flow cytometric analysis of A431 cells with AMPK beta 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 comprising 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 AMPK α 1 and AMPK α 2 genes encode 548 amino acid and 552 amino acid proteins, respectively. Human AMPK β 1 encodes a 271 amino acid protein and human AMPK β 2 encodes a 272 amino acid protein. The human AMPK γ 1 gene encodes a 331 amino acid protein. Human AMPK γ 2 and AMPK γ 3, 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