AMPK beta 1 Monoclonal Antibody

Catalog No: #27201

Package Size: #27201-1 50ul #27201-2 100ul

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

Description

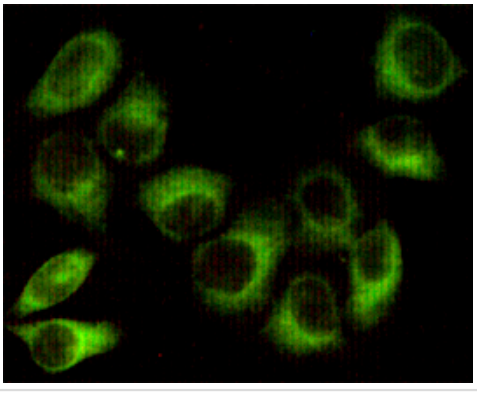
Product Name	AMPK beta 1 Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	1A7-E11-E9
Isotype	Hu Ms Rt Mk
Purification	Affinity purified
Applications	WB ICC IP IHC
Species Reactivity	Human;Mouse;Rat;Monkey
Specificity	This antibody detects endogenous levels of AMPK beta 1 and does not cross-react with related proteins.
Immunogen Type	Recombinant Protein
Immunogen Description	Purified recombinant human AMPK beta 1 protein fragments expressed in E.coli.
Conjugates	Unconjugated
Target Name	AMPK beta 1
Other Names	1300015D22Rik; 5 AMP activated protein kinase subunit beta 1; 5"-AMP-activated protein kinase subunit beta-1; AAKB1_HUMAN; AMP-ACTIVATED PROTEIN KINASE, NONCATALYTIC, BETA-1; AMP-activated, noncatalytic, beta-1; AMPK; AMPK beta 1 chain;
Accession No.	Uniprot: Q9Y478 Gene ID: 5564
SDS-PAGE MW	38kd
Formulation	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.02% sodium azide and 50% glycerol.
Storage	store at -20Λ C

Application Details

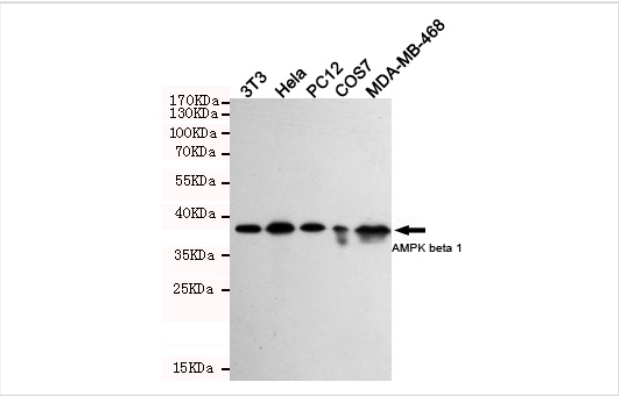
Western blotting: 1:1000

Immunocytochemistry: 1:100

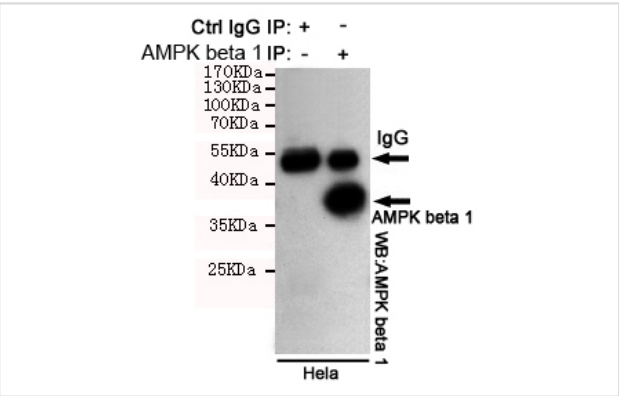
Images



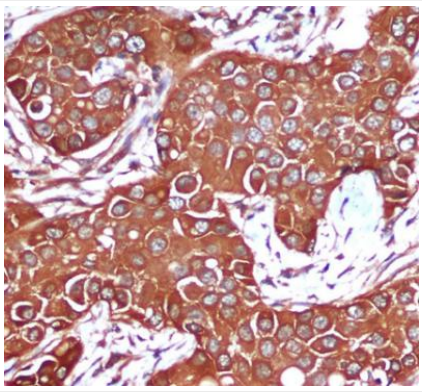
Immunocytochemistry staining of HeLa cells fixed with 1% Paraformaldehyde and using anti-AMPK beta 1 antibody (dilution 1:100).



Western blot detection of AMPK beta 1 in 3T3,Hela,PC-12,COS7 and MDA-MB-468 cell lysates using AMPK beta 1 antibody (1:1000 diluted).Predicted band size:38KDa.Observed band size:38KDa.Exposure time:5min.



Immunoprecipitation analysis of Hela cell lysates using AMPK beta 1 antibody.



Immunohistochemical analysis of paraffin-embedded Breast cancer using AMPK beta 1 Mouse mAb (1/200 dilution).Antigen retrieval was performed by pressure cooking in citrate buffer (pH 6.0).

Background

Non-catalytic subunit of AMP-activated protein kinase (AMPK),an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism.In response to reduction of intracellular ATP levels,AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein,carbohydrate and lipid biosynthesis,as well as cell growth and proliferation.AMPK acts via direct phosphorylation of metabolic enzymes,and by longer-term effects via phosphorylation of transcription regulators.Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton;probably by indirectly activating myosin.Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles,via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1,PRKAG2 or PRKAG3).

Published Papers

el at., Blocking AMPK β1 myristoylation enhances AMPK activity and protects mice from high-fat diet-induced obesity and hepatic steatosis. In Cell Rep on 2022 Dec 20 by Katyayanee Neopane, Natalie Kozlov, et al..PMID:36543129, , (2022)

PMID:36543129

el at., AMPKβ isoform expression patterns in various adipocyte models and in relation to body mass index.In Front Physiol on 2022 Aug 4 by Franziska Kopietz, Eva Degerman,et al..PMID:35991175, , (2022)

PMID:35991175

Note: This product is for in vitro research use only and is not intended for use in humans or animals.