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AMPK beta 1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52790

Specification

AMPK beta 1 Antibody - Product Information

Application	**WB, ICC, IP, IHC**
Primary Accession	Q9Y478
Reactivity	**Human, Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a**
Calculated MW	**38 KDa**

AMPK beta 1 Antibody - Additional Information

Gene ID 5564

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;AMPK subunit beta-1;AMPK-BETA-1;AMPKb;AU021155;E430008F22;HAMPKb;MGC17785;PRKAB1.

Dilution
WB~~1:1000
ICC~~1:100
IP~~1:500
IHC~~1:100

Format
Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

AMPK beta 1 Antibody - Protein Information

Name PRKAB1

Synonyms AMPK

Function
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

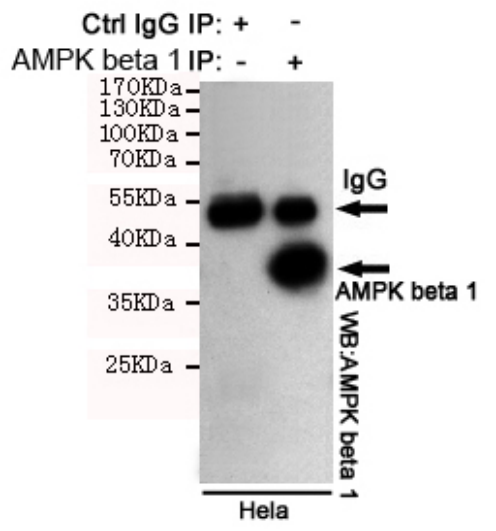
growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic 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).

AMPK beta 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AMPK beta 1 Antibody - Images



Immunoprecipitation analysis of Hela cell lysates using AMPK beta 1 mouse mAb.

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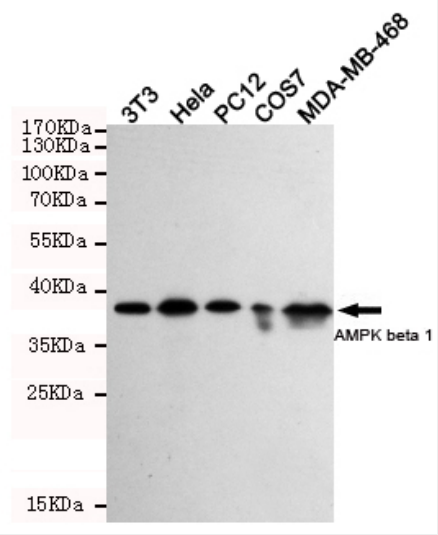
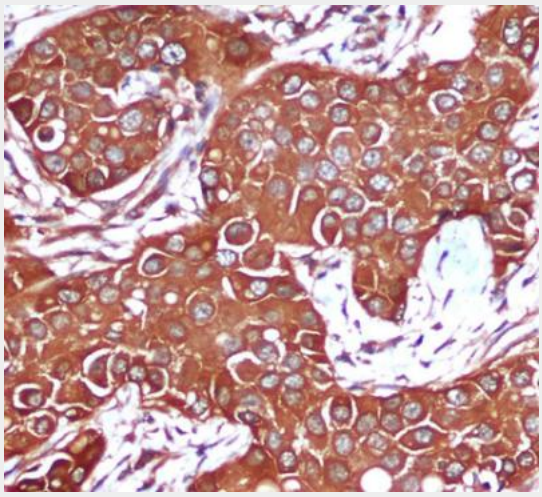
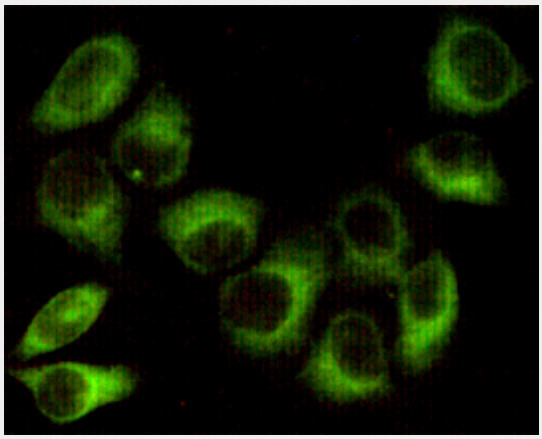


Western blot detection of AMPK beta 1 in 3T3,Hela,PC-12,COS7 and MDA-MB-468 cell lysates using AMPK beta 1 mouse mAb (1:1000 diluted).Predicted band size:38KDa.Observed band size:38KDa.Exposure time:5min.



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).



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

AMPK beta 1 Antibody - 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).

AMPK beta 1 Antibody - References

Carling D.,et al.Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.
Stapleton D.,et al.FEBS Lett. 409:452-456(1997).
Yamagata K.,et al.Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.
Wang X.,et al.Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
Scherer S.E.,et al.Nature 440:346-351(2006).