

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

AMPK beta 1 Antibody - Product Information

Application	IP, WB, IHC, ICC
Primary Accession	O9Y478
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

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

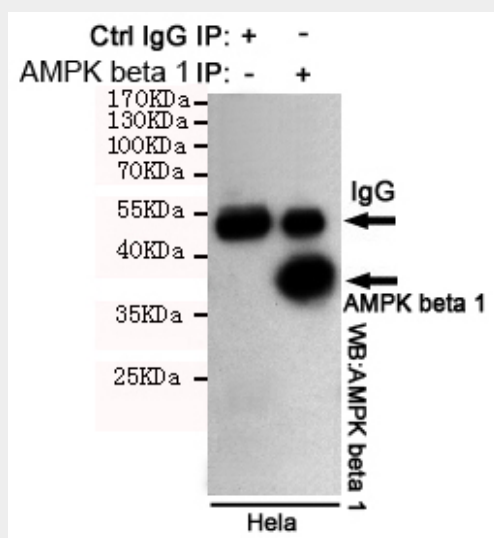
growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic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

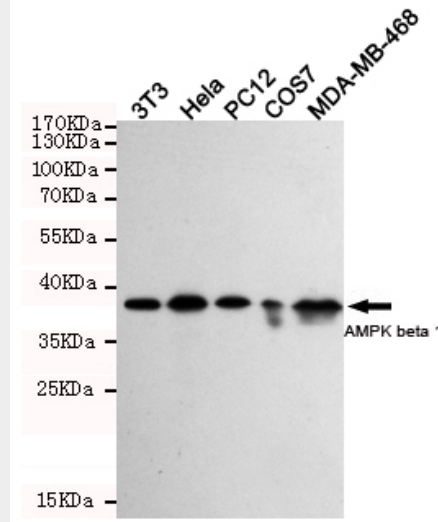
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

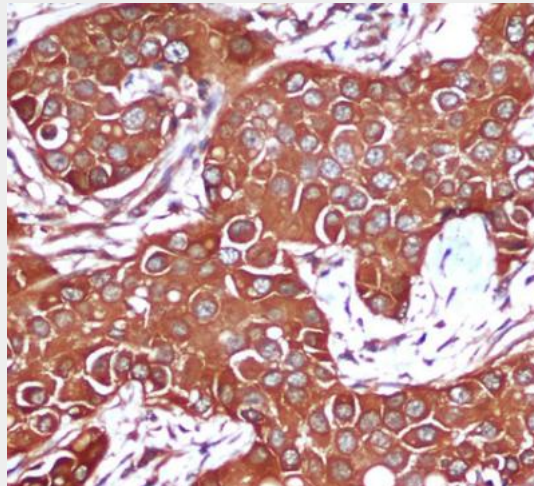
AMPK beta 1 Antibody - Images



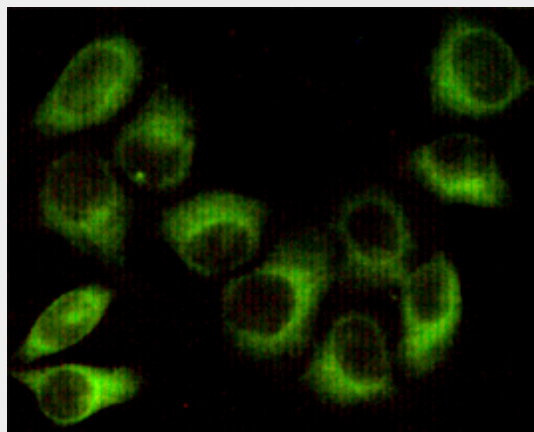
Immunoprecipitation analysis of HeLa cell lysates using AMPK beta 1 mouse mAb.



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: 38 kDa. Observed band size: 38 kDa. Exposure time: 5 min.



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

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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).