Product Name: AMPK beta 1 (3Y15) Rabbit Monoclonal Antibody
Catalog #: AMRe06843

Summary

Production Name	AMPK beta 1 (3Y15) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,IHC-P,ICC/IF,FC,IP,IF-P
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	PRKAB1
Alternative Names	5''-AMP-activated protein kinase subunit beta-1; AMP-activated, noncatalytic, beta-1; AMPK; AMPK beta 1 chain; AMPK subunit beta-1; AMPK-BETA-1; AMPKb; HAMPKb; PRKAB1;
Gene ID	5564.0
SwissProt ID	Q9Y478.

Application

Dilution Ratio	WB 1:1000-1:5000, IHC-P/IF-P 1:200-1:1000, ICC/IF 1:200-1:500, FCM 1:200-1:1000, IP

Product Name: AMPK beta 1 (3Y15) Rabbit Monoclonal Antibody
Catalog #: AMRe06843

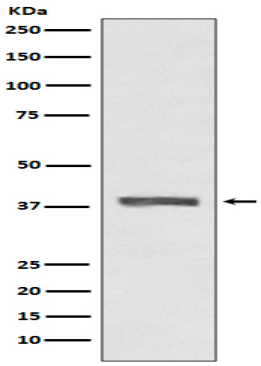
	1:20-1:50
Molecular Weight	30kDa

Background

AMP-activated protein kinase (AMPK) is highly conserved from yeast to plants and animals and plays a key role in the regulation of energy homeostasis. AMPK is a heterotrimeric complex composed of a catalytic α subunit and regulatory β and γ subunits, each of which is encoded by two or three distinct genes (α1, 2; β1, 2; γ1, 2, 3). 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).

Research Area

Image Data



Western blot analysis of AMPK beta 1 expression in HeLa cell lysate.

Note

For research use only.