



AMPK β 1

Mouse monoclonal Antibody

#53320

Catalog Number: 53320

Amount: 100 μ g/100 μ l

Swiss-Prot No. : Q9Y478

Gene name: prkab1

Gene id: 5564

Clone Number: 1A7-E11-E9

Form of Antibody: Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol

Storage/Stability: Store at -20°C/1 year

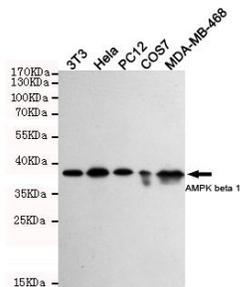
Immunogen: Purified recombinant human AMPK β 1 protein fragments expressed in E.coli

Purification: affinity-chromatography

Specificity/Sensitivity: This antibody detects endogenous levels of AMPK β 1 and does not cross-react with related proteins

Reactivity: Human, Mouse, Rat, Monkey

Applications: Predicted MW: 38kd WB: 1:1000 ICC/IHC: 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 mouse mAb (1:1000 diluted). Predicted band size: 38KDa. Observed band size: 38KDa.

Background:

The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit may be a positive regulator of AMPK activity. The myristoylation and phosphorylation of this subunit have been shown to affect the enzyme activity and cellular localization of AMPK. This subunit may also serve as an adaptor molecule mediating the association of the AMPK complex.