



AMPKβ1 Mouse mAb(Mix-mA)

Catalog No	YP-Ab-04800
Isotype	IgG
Reactivity	Human; Mouse;Rat
Applications	IHC;WB
Gene Name	PRKAB1 AMPK
Immunogen	Synthesized peptide derived from human AMPKβ1
Specificity	This antibody detects endogenous levels of AMPKβ1 at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.41% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC-p1:50-200 ,WB 1:1000-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AMPKβ1 (Ser182);AMPKβ1Ser182;p AMPK;p AMPK Beta 1;p AMPK Beta 1 (Ser182);AMPKβ1;PRKAB1 AMPK;5'-AMP-activated protein kinase subunit beta-1 (AMPK subunit beta-1) (AMPKb)
Observed Band	38kD
Calculated Molecular Weight	38kD
Cell Pathway	nucleus,nucleoplasm,cytosol,nucleotide-activated protein kinase complex,
Tissue Specificity	Brain,Lung,Muscle,Platelet,
Function	function:AMPK is responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. Also regulates cholesterol synthesis via phosphorylation and inactivation of hydroxymethylglutaryl-CoA reductase and hormone-sensitive lipase. This is a regulatory subunit, may be a positive regulator of AMPK activity. It may also serve as an adaptor molecule for the catalytic alpha-subunit.,PTM:Phosphorylated.,similarity:Belongs to the 5'-AMP-activated protein kinase beta subunit family.,subunit:Heterotrimer of an alpha catalytic subunit, a beta and a gamma non-catalytic regulatory subunits. Interacts with FNIP1 and FNIP2.,



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. [provided]

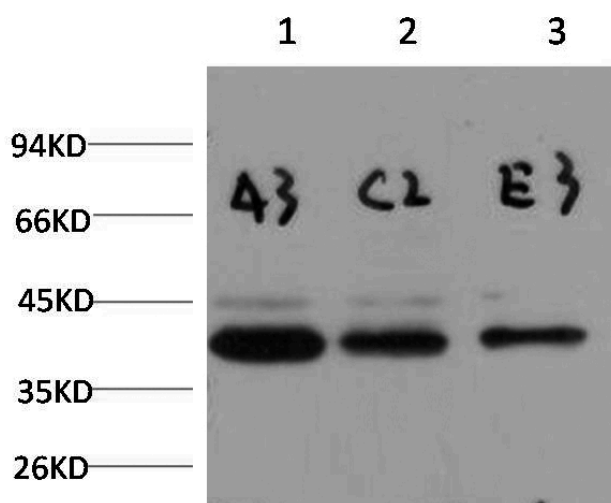
matters needing attention

Avoid repeated freezing and thawing!

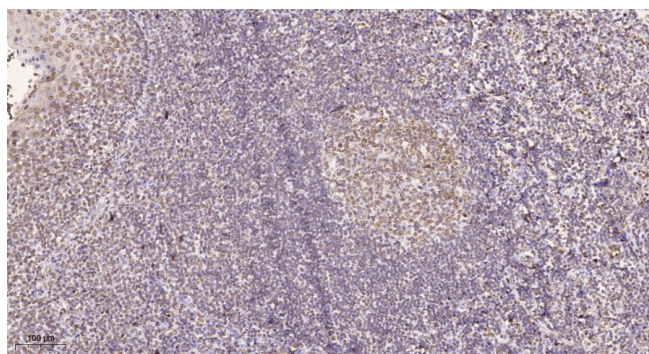
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of 1) Jurkat Cell, 2) Mouse Brain, 3) PC12 Cell Lysate using AMPK β 1 Mouse Monoclonal mAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Tris-EDTA, pH 9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200 (4° overnight). 3, Secondary antibody was diluted at 1:200 (room temperature, 45 min).