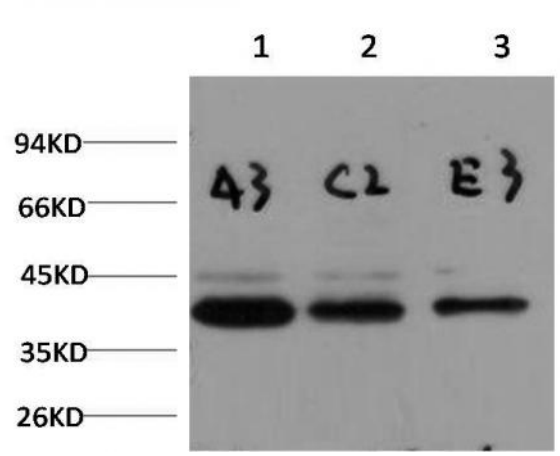
Best Tools for immunology Research

AMPKβ1 Mouse mAb(Mix-mA)

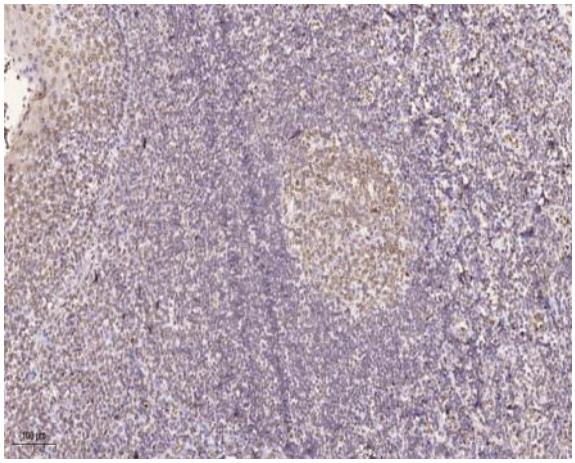
Catalog No :	YM33081
Reactivity :	Human;Mouse;Rat
Applications :	IHC;WB
Target :	AMPKβ1
Fields :	>>FoxO signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Apelin signaling pathway;>>Tight junction;>>Circadian rhythm;>>Thermogenesis;>>Insulin signaling pathway;>>Adipocytokine signaling pathway;>>Oxytocin signaling pathway;>>Glucagon signaling pathway;>>Insulin resistance;>>Non-alcoholic fatty liver disease;>>Alcoholic liver disease;>>Hypertrophic cardiomyopathy
Gene Name :	PRKAB1 AMPK
Protein Name :	AMPKβ1
Human Gene Id :	5564
Human Swiss Prot No :	Q9Y478
Mouse Gene Id :	19079
Mouse Swiss Prot No :	Q9R078
Rat Gene Id :	83803
Rat Swiss Prot No :	P80386
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 0.02% sodium azide.
Source :	Monoclonal, Mouse

Dilution :	IHC1:50-200 ,WB 1:1000-2000
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	38kD
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
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.,
Subcellular Location :	nucleus,nucleoplasm,cytosol,nucleotide-activated protein kinase complex,
Expression :	Brain,Lung,Muscle,Platelet,
Sort :	1988
No4 :	1

Products Images



Western blot analysis of 1)Jurkat Cell, 2) Mouse Brain, 3) PC12 Cell Lysate using AMPK β1Mouse Monoclonal mAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Tris-EDTA,pH9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200(4° overnight.3,Secondary antibody was diluted at 1:200(room temperature, 45min).